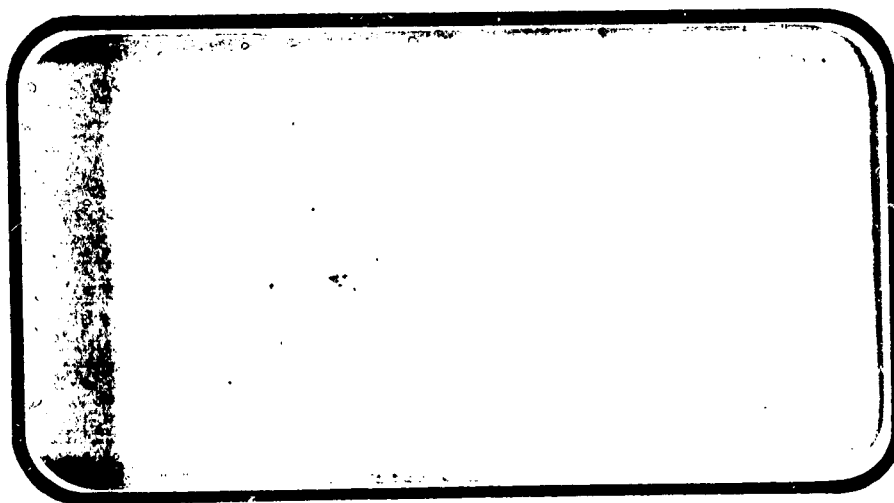


NATIONAL AERONAUTICS AND SPACE ADMINISTRATION



N74-15540

Unclas
26944

G3/31

NASA-CR-128794-VOL-6) RESULTS OF TESTS
QA12 AND IAS IN THE ARES RESEARCH CENTER
UNITARY PLAN WIND TUNNELS ON AN
0.030-SCALE MODEL OF THE SPACE (Chrysler
Corp.) 871 P HC \$45.75 CSCI 22R

SPACE SHUTTLE

AEROTHERMODYNAMIC DATA REPORT

October, 1973

DMS-DR-2032
NASA CR-128,794

VOLUME 6 OF 18

RESULTS OF TESTS OA12 AND IA9 IN THE
AMES RESEARCH CENTER UNITARY PLAN WIND TUNNELS
ON AN 0.030-SCALE MODEL OF THE SPACE SHUTTLE
VEHICLE 2A TO DETERMINE AERODYNAMIC LOADS

By

R. H. Spangler
Rockwell International

Prepared under NASA Contract Number NAS9-13247

By

Data Management Services
Chrysler Corporation Space Division
New Orleans, La. 70189

for

Engineering Analysis Division

Johnson Space Center
National Aeronautics and Space Administration
Houston, Texas

WING TUNNEL TEST SPECIFICS:

Test Numbers: ARC 11-707 (A)
ARC 97-707 (B)
ARC 87-707 (C)
NASA Series Numbers: IA9A, B, C and
OA12A, C
Test Date: 2 April - 17 May, 1973

FACILITY COORDINATOR:

C. R. Nysmith
Ames Research Center
Mail Stop N-229-5
Moffett Field, California 94035

Phone: (415) 965-5274

PROJECT ENGINEERS:

R. H. Spangler, R. L. Gillins, B. Chee
Rockwell International, Space Division
12214 Lakewood Boulevard
Mail Code AC-07
Downey, California 90241

Phone: (213) 922-1438

J. J. Brownson, R. E. Fahey
Ames Research Center
Mail Stop 227-5
Moffett Field, California 94035

Phone: (415) 965-6262

DATA MANAGEMENT SERVICES:

This document has been prepared by:

for D. A. Sarver, Terry Mulkey
Liaison Operations

D. E. Poucher, H. C. Zimmerle
Data Operations

[Signature]
[Signature]

This document has been reviewed and is approved for release.

for N. D. Kemp
Data Management Services

Chrysler Corporation Space Division Assumes *[Signature]* no responsibility for the data presented herein other than its display characteristics.

RESULTS OF TESTS OA12 AND IA9 IN THE
AMES RESEARCH CENTER UNITARY PLAN WIND TUNNEL
ON AN 0.030-SCALE MODEL OF THE SPACE SHUTTLE
VEHICLE 2A TO DETERMINE AERODYNAMIC LOADS

By

R. H. Spangler
Rockwell International

ABSTRACT

Tests were conducted in the NASA/ARC Unitary Plan Wind Tunnels during April and May 1973, on an 0.030-scale replica of the Space Shuttle Vehicle Configuration 2A. Aerodynamic loads data were obtained at Mach numbers from 0.6 to 3.5.

The investigation included Tests IA9A, B and C on the integrated (launch) configuration and Tests OA12A and C on the isolated orbiter (entry configuration). The integrated vehicle was tested at angles of attack and sideslip from -8 degrees to +8 degrees. The isolated orbiter was tested at angles of attack from -15 degrees to +40 degrees and angles of sideslip from -10 degrees to +10 degrees as dictated by trajectory considerations. The effects of orbiter/external tank incidence angle and deflected control surfaces on aerodynamic loads were also investigated.

(THIS PAGE INTENTIONALLY LEFT BLANK)

TABLE OF CONTENTS

	<u>Page</u>
ABSTRACT	iii
INDEX OF MODEL FIGURES	2
INDEX OF DATA FIGURES	3
INTRODUCTION	19
NOMENCLATURE	22
CONFIGURATIONS INVESTIGATED	26
TEST FACILITIES DESCRIPTION	29
DATA REDUCTION	30
TABLES	
I TEST CONDITIONS	31
II DATA SET COLLATIONS	32
III MODEL COMPONENT DIMENSIONAL DATA	44
IV PRESSURE ORIFICE LOCATIONS	
a. Orbiter Body	55
b. Orbiter Base, Body Flap Lower Surface, and Vertical Tail	56
c. Orbiter Wing	57
d. External Tank	58
e. Left SRM	59
FIGURES	
MODEL	60
DATA	66
APPENDIX - TABULATED SOURCE DATA	

INDEX OF MODEL FIGURES

<u>Figure</u>	<u>Title</u>	<u>Page</u>
1.	Axis Systems.	60
2.	Model Sketches.	
	a. Orbiter, O _{2A}	61
	b. SRM, S ₃ , and External Tank, T ₉	62
	c. Integrated Vehicle	63
3.	Model Installation Photographs.	
	a. Integrated (Launch) Vehicle Mounted in the ARC 9 x 7 Ft. Tunnel	64
	b. Isolated Orbiter (Entry Configuration) Mounted in the ARC 8 x 7 Ft. Tunnel	65

INDEX OF DATA FIGURES

TITLE	TYPE OF PLOT	PARAMETERS				CONDITIONS VARYING	PAGES
		i_0	α	β	δR		
<u>VOLUME 4</u>							
<u>Test IA9A</u>							
Longitudinal Distribution of Orbiter Fuselage Pressures	<u>CP vs X/LB</u>	1.5	A	0	0	<u>PHI, MACH, ALPHA</u>	1-24
		0.5	A	0	0		25-54
		-1.2	A	0	0		55-78
		0.5	-8	E	0	<u>PHI, MACH, BETA</u>	79-102
		0.5	-4	E	0		103-126
		0.5	0	E	0		127-156
		0.5	4	E	0		157-180
		0.5	8	E	0		181-204
		0.5	0	E	-5		205-216
		0.5	0	E	-10		217-228
Longitudinal Distribution of External Tank Pressures	<u>CP vs X/LT</u>	0.5	0	E	-15		229-240
		1.5	A	0	0	<u>PHI, MACH, ALPHA</u>	241-264
		0.5	A	0	0		265-294
		-1.2	A	0	0		295-318

INDEX OF DATA FIGURES (CONTINUED)

TITLE	TYPE OF PLOT	PARAMETERS i_0 α β θ R	CONDITIONS VARYING	PAGES
Longitudinal Distribution of External Tank Pressures	CP vs X/LT	0.5 -8 E 0	PHI, MACH, BETA	319-342
		0.5 -4 E 0		343-366
		0.5 0 E 0		367-396
		0.5 4 E 0		397-420
		0.5 8 E 0		421-444
Longitudinal Distribution of SRM Booster Pressures	CP vs X/LS	1.5 A 0 0	PHI, MACH, ALPHA	445-460
		0.5 A 0 0		461-480
		-1.2 A 0 0		481-496
		0.5 -8 E 0		497-512
		0.5 -4 E 0		513-528
Chordwise Distribution of Upper and Lower Surface Wing Pressures	CP vs X/CW	0.5 0 E 0	PHI, MACH, BETA	529-548
		0.5 4 E 0		549-564
		0.5 8 E 0		565-580
		1.5 A 0 0		581-596
		0.5 A 0 0		597-616
		-1.2 A 0 0	Y/EL, MACH, BETA	617-632
		0.5 -8 E 0		633-648

INDEX OF DATA FIGURES (CONTINUED)

TITLE	TYPE OF PLOT	PARAMETERS			CONDITIONS VARYING	PAGES
		i_0	α	β		
Chordwise Distribution of Upper and Lower Surface Wing Pressures	CP vs X/CW	0.5	-4	E	Y/EA, MACH, BETA	700-704
		0.5	0	E		705-709
		0.5	4	E		710-714
		0.5	8	E		715-719
Chordwise Distribution of Left and Right Surface Vertical Tail Pressures	CP vs X/CV	0.5	A	0	Z/BV, MACH, ALPHA	717-736
		0.5	-8	E	Z/BV, MACH, BETA	737-752
		0.5	-4	E		753-762
		0.5	0	E		763-768
		0.5	4	E		769-804
		0.5	8	E		805-810
		0.5	-8	E		811-818
		0.5	0	E		819-836
		0.5	8	E		837-844
		0.5	-8	E		845-851
		0.5	0	E		852-860
		0.5	8	E		861-867
		0.5	-8	E		868-875

INDEX OF DATA FIGURES (CONTINUED)

TITLE	TYPE OF PLOT	PARAMETERS I O A B R	CONDITIONS VARYING	PAGES
Chordwise Distribution of Left and Right Surface Vertical Tail Pressures	CP vs X/CV	0.5 C E -15	Z/BV, MACH, BETA	877-884
Orbiter Base Pressures	CP vs ALPHA	0.5 B C O	MACH, ALPHA	885-892
Orbiter Base Pressures	CP vs BETA	0.5 O F O	MACH, BETA	893-902
Upper MPS Nozzle Pressures	CP vs ALPHA	0.5 B O O	PHI, MACH, X/LNP	903-911
Upper MPS Nozzle Pressures	CP vs BETA	0.5 O F O	PHI, MACH, X/LNP	913-917
OMS Nozzle Pressures	CP vs ALPHA	0.5 B O O	PHI, MACH X/LNM	918-922
OMS Nozzle Pressures	CP vs BETA	0.5 O F O	PHI, MACH X/LNM	923-927
SRM Booster Base Pressures	CP vs ALPHA	0.5 B O O	PHI, MACH, X/LS	928-932
SRM Booster Base Pressures	CP vs BETA	0.5 O F O	PHI, MACH, X/LS	933-937
External Tank Base Pressures	CP vs ALPHA	0.5 B O O	PHI, MACH, X/LT	938-942
External Tank Base Pressures	CP vs BETA	0.5 O F O	PHI, MACH, X/LT	943-947
VOLUME 5				
Test 1A9B	CP vs X/LB	0.5 A O O	PHI, MACH, ALPHA	1-12
Longitudinal Distribution of Orbiter Fuselage Pressures		0.5 B I O	PHI, MACH, BETA	13-14
		0.5 4 I O		15-16

INDEX OF DATA FIGURES (CONTINUED)

TITLE	TYPE OF PLOT	PARAMETERS i c α β θ R	CONDITIONS VARYING	PAGES
Longitudinal Distribution of Orbiter Fuselage Pressures	<u>CP vs X/LB</u>	0.5 0 I 0	<u>PHI, MACH, BETA</u>	37-48
		0.5 -4 I 0		49-60
		0.5 -8 I 0		61-73
		0.5 0 E -15		73-84
		0.5 0 E -10		85-96
		0.5 0 E 15		97-108
Longitudinal Distribution of External Tank Pressures	<u>CP vs X/LT</u>	0.5 A 0 0	<u>PHI, MACH, ALPHA</u>	109-120
		0.5 8 I 0	<u>PHI, MACH, BETA</u>	121-132
		0.5 4 I 0		133-144
		0.5 0 I 0		145-156
		0.5 -4 I 0		157-168
		0.5 -8 I 0		169-180
Longitudinal Distribution of SRM Booster Pressures	<u>CP vs X/LS</u>	0.5 A 0 0	<u>PHI, MACH, ALPHA</u>	181-188
		0.5 8 I 0	<u>PHI, MACH, ALPHA</u>	189-196
		0.5 4 I 0	<u>PHI, MACH, BETA</u>	197-204
		0.5 0 I 0	<u>PHI, MACH, BETA</u>	205-212

INDEX OF DATA FIGURES (CONTINUED)

TITLE	TYPE OF PLOT	PARAMETERS i_o α β ϕ_R	CONDITIONS VARYING	PAGES
Longitudinal Distribution of SRM Booster Pressures	CP vs X/LS	0.5 -4 I 0	PHI, MACH, BETA	213-220
	↓	0.5 -8 I 0	PHI, MACH, BETA	221-228
Chordwise Distribution of Upper and Lower Surface Wing Pressures	CP vs X/CW	0.5 A 0 0	Y/BW, MACH, ALPHA	229-236
	↓	0.5 8 I 0	Y/BW, MACH, BETA	237-244
	↓	0.5 4 I 0		245-252
	↓	0.5 0 I 0		253-260
	↓	0.5 -4 I 0		261-268
	↓	0.5 -8 I 0		269-276
Chordwise Distribution of Left and Right Surface Vertical Tail Pressures	CP vs X/CV	0.5 A 0 0	Z/BV, MACH, ALPHA	277-284
	↓	0.5 8 I 0	Z/BV, MACH, BETA	285-292
	↓	0.5 4 I 0		293-300
	↓	0.5 0 I 0		301-308
	↓	0.5 -4 I 0		309-316
	↓	0.5 -8 I 0		317-324
	↓	0.5 -8 E -15		325-332
	↓	0.5 0 E -15		333-340

INDEX OF DATA FIGURES (CONTINUED)

TITLE	TYPE OF PLOT	PARAMETERS				CONDITIONS VARYING	PAGES
		i_o	α	β	δR		
Chordwise Distribution of Left and Right Surface Vertical Tail Pressures	CP vs X/C_V	0.5	8	E	-15	Z/BV, MACH, BETA	341-348
		0.5	-8	E	-10		349-356
		0.5	0	E	-10		357-364
		0.5	8	E	-10		365-372
		0.5	-8	E	15		373-380
		0.5	0	E	15		381-388
		0.5	8	E	15		389-396
Orbiter Base Pressures	CP vs ALPHA	0.5	B	0	0	MACH, ALPHA	397-400
Orbiter Base Pressures	CP vs BETA	0.5	0	G	0	MACH, BETA	401-404
Upper MPS Nozzle Pressures	CP vs ALPHA	0.5	B	0	0	PHI, MACH, X/LNP	405-406
Upper MPS Nozzle Pressures	CP vs BETA	0.5	0	G	0	PHI, MACH, X/LNP	407-408
OMS Nozzle Pressures	CP vs ALPHA	0.5	B	0	0	PHI, MACH, X/LNM	409-410
OMS Nozzle Pressures	CP vs BETA	0.5	0	G	0	PHI, MACH, X/LNM	411-412
SRM Booster Base Pressures	CP vs ALPHA	0.5	B	0	0	PHI, MACH, X/IS	413-414
SRM Booster Base Pressures	CP vs BETA	0.5	0	G	0	PHI, MACH, X/IS	415-416
External Tank Base Pressures	CP vs ALPHA	0.5	B	0	0	PHI, MACH, X/LT	417-418
External Tank Base Pressures	CP vs BETA	0.5	0	G	0	PHI, MACH, X/LT	419-420

INDEX OF DATA FIGURES (CONTINUED)

TITLE	TYPE OF PLOT	PARAMETERS i_o α β δ_R	CONDITIONS VARYING	PAGES
<u>Test IA9C</u>				
Longitudinal Distribution of Orbiter Fuselage Pressures	<u>CP vs X/LB</u>	0.5 A 0 0	PHI, MACH, ALPHA	421-438
		0.5 -8 E 0	PHI, MACH, BETA	439-456
		0.5 -4 E 0		457-474
		0.5 0 E 0		475-492
		0.5 4 E 0		493-510
		0.5 8 E 0		511-528
		0.5 0 E -15		529-546
		0.5 0 E -10		547-564
Longitudinal Distribution of External Tank Pressures	<u>CP vs X/LT</u>	0.5 A 0 0	PHI, MACH, ALPHA	565-582
		0.5 -8 E 0	PHI, MACH, BETA	583-600
		0.5 -4 E 0		601-618
		0.5 0 E 0		619-636
		0.5 4 E 0		637-654
		0.5 8 E 0		655-672

INDEX OF DATA FIGURES (CONTINUED)

TITLE	TYPE OF PLOT	PARAMETERS i_o α β δR	CONDITIONS VARYING	PAGES
Longitudinal Distribution of SRM Booster Pressures	CP vs X/LS	0.5 A 0 0	PHI, MACH, ALPHA	673-684
		0.5 -8 E 0	PHI, MACH, BETA	685-696
		0.5 -4 E 0		697-708
		0.5 0 E 0		709-720
		0.5 4 E 0		721-732
		0.5 8 E 0		733-744
Chordwise Distribution of Upper and Lower Surface Wing Pressures	CP vs X/CW	0.5 A 0 0	Y/BW, MACH, ALPHA	745-756
		0.5 -8 E 0	Y/BW, MACH, BETA	757-767
		0.5 -4 E 0		768-780
		0.5 0 E 0		781-792
		0.5 4 E 0		793-804
		0.5 8 E 0		805-816
Chordwise Distribution of Left and Right Surface Vertical Tail Pressures	CP vs X/CV	0.5 A 0 0	Z/BV, MACH, ALPHA	817-828
		0.5 -8 E 0	Z/BV, MACH, BETA	829-840
		0.5 -4 E 0		841-852
		0.5 0 E 0		853-864
		0.5 4 E 0		865-876

INDEX OF DATA FIGURES (CONTINUED)

TITLE	TYPE OF PLOT	PARAMETERS i_0 α β ϕ_R	CONDITIONS VARYING	PAGES
Chordwise Distribution of Left and Right Surface Vertical Tail Pressures	CP vs X/CV	0.5 8 E 0 0.5 -8 E -15 0.5 0 E -15 0.5 8 E -15 0.5 -8 E -10 0.5 0 E -10 0.5 8 E -10	Z/BV, MACH, BETA	877-888 889-900 901-912 913-924 925-936 937-948 949-960
Orbiter Base Pressures	CP vs ALPHA	0.5 B 0 0	MACH, ALPHA	961-966
Orbiter Base Pressures	CP vs BETA	0.5 0 H 0	MACH, BETA	967-972
Upper MPS Nozzle Pressures	CP vs ALPHA	0.5 B 0 0	PHI, MACH, X/LNP	973-975
Upper MPS Nozzle Pressures	CP vs BETA	0.5 0 H 0	PHI, MACH, X/LNP	976-978
OMS Nozzle Pressures	CP vs ALPHA	0.5 B 0 0	PHI, MACH, X/LNM	979-981
OMS Nozzle Pressures	CP vs BETA	0.5 0 H 0	PHI, MACH, X/LNM	982-984
SRM Booster Base Pressures	CP vs ALPHA	0.5 B 0 0	PHI, MACH, X/LS	985-987
SRM Booster Base Pressures	CP vs BETA	0.5 0 H 0	PHI, MACH, X/LS	988-990
External Tank Base Pressures	CP vs ALPHA	0.5 B 0 0	PHI, MACH, X/LT	991-993
External Tank Base Pressures	CP vs BETA	0.5 0 H 0	PHI, MACH, X/LT	994-996

INDEX OF DATA FIGURES (CONTINUED)

TITLE	TYPE OF PLOT	α	β	δ_e	δ_R	δ_{RF}	CONDITIONS VARYING	PAGES
<u>VOLUME 6</u>								
<u>Test OA12A</u>								
Longitudinal Distribution of Orbiter Fuselage Pressure	CP vs X/LB	C	C	0	0	0	PHI, MACH, ALPHA	1-24
		0	J	0	0	0	PHI, MACH, BETA	25-36
		10	J	0	0	0		37-48
		20	J	0	0	0		49-60
		0	K	0	-10	0		61-78
		0	K	0	-20	0		79-96
		0	L	10	0	0		97-108
		0	K	-10	0	0		109-126
		0	K	-20	0	0		127-144
		0	K	0	0	40		145-162
Chordwise Distribution of Upper and Lower Surface Wing Pressures	CP vs X/CW	C	0	0	0	0	Y/BW, MACH, ALPHA	163-178
		0	J	0	0	0	Y/BW, MACH, BETA	179-186
		10	J	0	0	0		187-194
		20	J	0	0	0		195-202
		0	L	10	0	0		203-210

INDEX OF DATA FIGURES (CONTINUED)

TITLE	TYPE OF PLOT	PARAMETERS				CONDITIONS VARYING	PAGES
α	β	δ_e	δ_R	ϕ_{RF}			
<hr/>							
Chordwise Distribution of Upper and Lower Surface Wing Pressures	CP vs X/CW	10	L	10	0	0	Y/BW, MACH, BETA
		20	L	10	0	0	
		0	K	-10	0	0	
		10	K	-10	0	0	
		20	K	-10	0	0	
		0	K	-20	0	0	
		10	K	-20	0	0	
		20	K	-20	0	0	
		20	K	-20	0	0	
Chordwise Distribution of Left and Right Surface Vertical Tail Pressures	CP vs X/CV	C	0	0	0	0	Z/BV, MACH, ALPHA
		0	J	0	0	0	Z/BV, MACH, BETA
		10	J	0	0	0	
		20	J	0	0	0	
		0	K	0	-10	0	
		10	K	0	-10	0	
		20	K	0	-10	0	
		0	K	0	-20	C	

INDEX OF DATA FIGURES (CONTINUED)

TITLE	TYPE OF PLOT	PARAMETERS α β ϕ_e ϕ_R ϕ_{RF}	CONDITIONS VARYING	PAGES
Chordwise Distribution of Left and Right Surface Vertical Tail Pressures	CP vs X/CV	10 K 0 -20 0 0	Z/BV, MACH, BETA	387-398
		20 K 0 -20 0 0		399-410
		0 K 0 0 40 40		411-422
		10 K 0 0 40 40		423-434
		20 K 0 0 40 40		435-446
Orbiter Base Pressures	CP vs ALPHA	C 0 0 0 0 0	MACH, ALPHA	447-450
Orbiter Base Pressures	CP vs BETA	0 J 0 0 0 0	MACH, BETA	451-454
Upper MPS Nozzle Pressures	CP vs ALPHA	C 0 0 0 0 0	PHI, MACH, X/LNP	455-456
Upper MPS Nozzle Pressures	CP vs BETA	0 J 0 0 0 0	PHI, MACH, X/LNP	457-458
OMS Nozzle Pressures	CP vs ALPHA	C 0 0 0 0 0	PHI, MACH, X/LNM	459-460
OMS Nozzle Pressures	CP vs BETA	0 J 0 0 0 0	PHI, MACH, X/LNM	461-462
Test OAL2C				
Longitudinal Distribution of Orbiter Fuselage Pressures	CP vs X/LB	D 0 0 0 0 40	PHI, MACH, ALPHA	463-480
		0 M 0 -20 40 40	PHI, MACH, BETA	481-498
		10 M 0 -20 40 40		499-516
		20 M 0 -20 40 40		517-534

INDEX OF DATA FIGURES (CONTINUED)

TITLE	TYPE OF PLOT	α	β	δe	δR	δRF	CONDITIONS VARYING	PAGES
Longitudinal Distribution of Orbiter Fuselage Pressures	CP vs X/LB	30	M	0	0	40	PHI, MACH, BETA	535-552
		0	M	10	0	40		553-570
		0	M	-20	0	40		571-588
		0	M	-40	0	40		589-606
Chordwise Distribution of Upper and Lower Surface Wing Pressures	CP vs X/CW	D	0	0	0	40	Y/BW, MACH, ALPHA	607-618
		0	M	0	-20	40	Y/BW, MACH, BETA	619-630
		10	M	0	-20	40		631-642
		20	M	0	-20	40		643-654
		30	M	0	0	40		655-666
		0	M	10	0	40		667-678
		10	M	10	0	40		679-690
		20	M	10	0	40		691-702
		0	M	-20	0	40		703-714
		10	M	-20	0	40		715-726
		20	M	-20	0	40		727-738
		0	M	-40	0	40		739-750

INDEX OF DATA FIGURES (CONTINUED)

TITLE	TYPE OF PLOT	α	β	θ_e	θ_R	θ_{RF}	CONDITIONS VARYING	PAGES
Chordwise Distribution of Upper and Lower Surface Wing Pressures	CP vs X/CW	10	M	-40	0	40	Y/BW, MACH, BETA	751-762
		20	M	-40	0	40	Y/BW, MACH, BETA	763-774
	CP vs X/CV	D	0	0	0	40	Z/BV, MACH, ALPHA	775-786
		0	M	0	-20	40	Z/BV, MACH, BETA	787-798
Chordwise Distribution of Left and Right Surface Vertical Tail Pressures		10	M	0	-20	40		799-810
		20	M	0	-20	40		811-822
		30	M	0	0	40		823-834
		30	M	0	-20	40		835-846
Orbiter Base Pressures	CP vs ALPHA	D	0	0	0	40	MACH, ALPHA	847-850
Orbiter Base Pressures	CP vs BETA	0	M	0	-20	40	MACH, BETA	851-854
Upper MPS Nozzle Pressures	CP vs ALPHA	D	0	0	0	40	PHI, MACH, X/LNP	855-856
Upper MPS Nozzle Pressures	CP vs BETA	0	M	0	-20	40	PHI, MACH, X/LNP	857-858
OMS Nozzle Pressures	CP vs ALPHA	D	0	0	0	40	PHI, MACH, X/LNM	859-860
OMS Nozzle Pressures	CP vs BETA	0	M	0	-20	40	PHI, MACH, X/LNM	861-862

INDEX OF DATA FIGURES (CONCLUDED)

PARAMETER SCHEDULES:

ALPHA

- A) -4, 0, 4, 8 Degrees
- B) -8, -6, -4, -2, 0, 2, 4, 6, 8 Degrees
- C) -4, 0, 5, 10, 15, 20, 22.5 Degrees
- D) 0, 5, 10, 15, 20 Degrees

BETA

- E) -4, 0, 4, 8 or -4, 2, 4, 8 Degrees
- F) -8, -6, -4, -2, 0, 2, 4, 6, 8 Degrees
- G) -7, -5, 3, 5, 7, 9 Degrees
- H) -8, -6, -4, -2, 2, 4, 6, 8 Degrees
- I) -5, 5, 7, 9 or -6, 4, 6, 8 Degrees
- J) -10, -5, 5, 10 Degrees
- K) -8, -4, 0, 4, 8 Degrees
- L) -10, 0, 10 Degrees
- M) -6, -3, 0, 3, 6 Degrees

INTRODUCTION

The 0.030-scale Aero Loads Space Shuttle model was tested in the Unitary Plan Wind Tunnels at ARC starting April 2, and continuing through May 17, 1973 as follows:

IA9A	11-foot Transonic	April 2 to April 14, 1973
OA12A	11-foot Transonic	April 16 to April 29, 1973
IA9C	8x7-foot Supersonic	April 23 to May 1, 1973
OA12C	8x7-foot Supersonic	May 2 to May 8, 1973
IA9B	9x7-foot Supersonic	May 9 to May 17, 1973

The testing was conducted in all three legs of the Unitary Plan Wind Tunnels to obtain a Mach number range from 0.6 to 3.5. Aerodynamic loads data were obtained for the ascent and entry configurations. The effects of control surface deflections were also investigated.

This report consists of 3 volumes of force data and 15 volumes of pressure data for a total of 18 volumes arranged in the following manner:

VOLUME NO.

CONTENTS

- | | |
|----|---|
| 1 | IA9A force data |
| 2 | IA9B and IA9C force data |
| 3 | OA12A and OA12C force data |
| 4 | IA9A plotted pressure data |
| 5 | IA9B and IA9C plotted pressure data |
| 6 | OA12A and OA12C plotted pressure data |
| 7 | IA9A tabulated pressure data <ul style="list-style-type: none">(a) orbiter fuselage(b) orbiter base(c) upper MPS nozzle |
| 8 | IA9A tabulated pressure data <ul style="list-style-type: none">(a) OMS nozzle(b) body flap(c) OMS pod outside(d) lower wing surface |
| 9 | IA9A tabulated pressure data <ul style="list-style-type: none">(a) upper wing surface(b) left vertical tail surface(c) right vertical tail surface(d) APU inlet(e) SRM booster base |
| 10 | IA9A tabulated pressure data <ul style="list-style-type: none">(a) SRM booster(b) external tank(c) external tank base |

INTRODUCTION (CONTINUED)

- 11 IA9B tabulated pressure data
(a) orbiter fuselage
(b) orbiter base
(c) upper MPS nozzle
(d) OMS nozzle
(e) body flap
(f) OMS pod outside
(g) lower wing surface
- 12 IA9B tabulated pressure data
(a) upper wing surface
(b) left vertical tail surface
(c) right vertical tail surface
(d) APU inlet
(e) SRM booster base
(f) SRM booster
(g) external tank
(h) external tank base
- 13 IA9C tabulated pressure data
(a) orbiter fuselage
(b) orbiter base
(c) upper MPS nozzle
(d) OMS nozzle
(e) body flap
(f) OMS pod outside
- 14 IA9C tabulated pressure data
(a) lower wing surface
(b) upper wing surface
(c) left vertical tail surface
(d) right vertical tail surface
- 15 IA9C tabulated pressure data
(a) APU inlet
(b) SRM booster base
(c) SRM booster
(d) external tank
(e) external tank base
- 16 OA12A tabulated pressure data
(a) orbiter fuselage
(b) orbiter base
(c) upper MPS nozzle
(d) OMS nozzle
(e) body flap
(f) OMS pod outside

INTRODUCTION (CONCLUDED)

- 17 0A1A tabulated pressure data
 - (a) lower wing surface
 - (b) upper wing surface
 - (c) left vertical tail surface
 - (d) right vertical tail surface
 - (e) APU inlet
- 18 0A1C tabulated pressure data
 - All components

NOMENCLATURE General

<u>SYMBOL</u>	<u>SADSAC SYMBOL</u>	<u>DEFINITION</u>
a		speed of sound; m/sec, ft/sec
C_p	CP	pressure coefficient; $(p_1 - p_\infty)/q$
M	MACH	Mach number; V/a
p		pressure; N/m^2 , psf
q	Q(NSM) Q(PSF)	dynamic pressure; $1/2 \rho V^2$, N/m^2 , psf
RN/L	RN/L	unit Reynolds number; per m, per ft
V		velocity; m/sec, ft/sec
α	ALPHA	angle of attack, degrees
β	BETA	angle of sideslip, degrees
ψ	PSI	angle of yaw, degrees
ϕ	PHI	angle of roll, degrees
ρ		mass density; kg/m^3 , slugs/ft ³

Reference & C.G. Definitions .

A_b		base area; m^2 , ft^2
b	BREF	wing span or reference span; m, ft
$C.G.$		center of gravity
l_{REF}	LREF	reference length or wing mean aerodynamic chord; m, ft
S	SREF	wing area or reference area; m^2 , ft^2
	MRP	moment reference point
	XMRP	moment reference point on X axis
	YMRP	moment reference point on Y axis
	ZMRP	moment reference point on Z axis

SUBSCRIPTS

i	base
l	local
s	static conditions
t	total conditions
∞	free stream

NOMENCLATURE (Continued)

Body-Axis System

<u>SYMBOL</u>	<u>SADSAC SYMBOL</u>	<u>DEFINITION</u>
C_N	CN	normal-force coefficient; $\frac{\text{normal force}}{qS}$
C_A	CA	axial-force coefficient; $\frac{\text{axial force}}{qS}$
C_Y	CY	side-force coefficient; $\frac{\text{side force}}{qS}$
C_{A_b}	CAB	base-force coefficient; $\frac{\text{base force}}{qS}$ $-A_b(P_b - P_\infty)/qS$
C_{A_f}	CAF	forebody axial force coefficient, $C_A - C_{A_b}$
C_m	CLM	pitching-moment coefficient; $\frac{\text{pitching moment}}{qS l_{REF}}$
C_n	CYN	yawing-moment coefficient; $\frac{\text{yawing moment}}{qS b}$
C_l	CBL	rolling-moment coefficient; $\frac{\text{rolling moment}}{qS b}$

Stability-Axis System

C_L	CL	lift coefficient; $\frac{\text{lift}}{qS}$
C_D	CD	drag coefficient; $\frac{\text{drag}}{qS}$
C_{D_b}	CDB	base-drag coefficient; $\frac{\text{base drag}}{qS}$
C_{D_f}	CDF	forebody drag coefficient; $C_D - C_{D_b}$
C_Y	CY	side-force coefficient; $\frac{\text{side force}}{qS}$
C_m	CLM	pitching-moment coefficient; $\frac{\text{pitching moment}}{qS l_{REF}}$
C_n	CLN	yawing-moment coefficient; $\frac{\text{yawing moment}}{qS b}$
C_l	CSL	rolling-moment coefficient; $\frac{\text{rolling moment}}{qS b}$
L/D	L/D	lift-to-drag ratio; C_L/C_D
L/D_f	L/DF	lift to forebody drag ratio; C_L/C_{D_f}

NOMENCLATURE (CONTINUED)

ADDITIONS TO STANDARD LIST

<u>SYMBOL</u>	<u>PLOT SYMBOL</u>	<u>DEFINITION</u>
δ_R	RUDDER	rudder, surface deflection angle, positive deflection, trailing edge to the left; degrees.
δ_e	ELEVON	elevon, surface deflection angle, positive deflection, trailing edge down; degrees.
δ_{RF}	RUDFLR	rudder flare, split rudder deflection angle, left split rudder trailing edge left and right split rudder trailing edge right, $\delta_{RF} = (\delta_{RL} + \delta_{RR})/2$, positive deflection; degrees.
i_o	ORBINC	incidence angle between the orbiter and external tank, $i_o = \alpha_t - \alpha_t$; degrees.
β_T	BETAT	angle of sideslip of external tank.
α_T	ALPHAT	angle of attack of external tank.
l_B	LB	length of orbiter body; in.
l_T	LT	length of external tank; in.
l_s	LS	length of SRM booster; in.
l_{NM}	LMN	length of OMS nozzle, positive direction forward of exit plane; in.
l_{NP}	LNP	length of MPS nozzle, positive direction forward of exit plane; in.
$b/2$	BW	wing semi-span; in.
b_v	BV	vertical tail span; in.
x	X	distance from component nose; in.
y	Y	lateral distance from centerline; in.

NOMENCLATURE (CONCLUDED)

<u>SYMBOL</u>	<u>PLOT SYMBOL</u>	<u>DEFINITION</u>
z	Z	vertical distance measured from W.L. 500 (vertical tail reference root chord); in.
c_w	CW	local wing chord; in.
c_v	CV	local vertical tail chord; in.
x/l_B	X/LB	longitudinal position/orbiter body length.
x/l_T	X/LT	longitudinal position/external tank length.
x/l_S	X/LS	longitudinal position/booster length.
x/l_{NM}	X/LNM	longitudinal position/OMS nozzle length.
x/l_{NP}	X/LNP	longitudinal position/MPS nozzle length.
x/c_w	X/CW	local chordwise position/local wing chord length.
x/c_v	X/CV	local chordwise position/local vertical tail chord length.
$y/b/2$	Y/BW	local spanwise position/wing semi-span.
z/b_v	Z/BV	local spanwise position/vertical tail span.

CONFIGURATIONS INVESTIGATED

The 0.030-scale aero loads model was a replica of the Space Shuttle Vehicle 2A. It consisted of four major components: the orbiter, the external oxygen and hydrogen tank (ET) and two solid rocket boosters (SRB).

On the ascent configuration, the orbiter was strut mounted from the ET on a Task Corporation MK XVI 2.5-inch diameter internal balance. The left SRB was strut mounted from the ET on a Task Corporation MK XXII 1.5-inch diameter internal balance. No attempt was made to simulate actual inter-attachments. The ET was sting mounted to the tunnel model support system on a Task Corporation 4.0-inch diameter internal balance. The right SRB was strut mounted symmetrically to the left side, but did not contain a balance. The orbiter configuration, designated as O2A, consisted of B10C5D7W87V5R5M3F4.

The entry configuration consisted of the isolated orbiter, sting mounted to the tunnel model support system on a Task Corporation MK XXA 2.5-inch diameter internal balance. Midway through the OAL2C test, the MK XXA balance was damaged and was replaced by the MK XXB for the high angles of attack. The orbiter was provided with deflectable elevons by means of interchangeable brackets, deflectable rudder by means of a pin-indexed hinge, and interchangeable rudders to obtain different speed brake flare angles. The main propulsion system engines were removed during entry configuration testing to provide sting clearance. A cover plate was provided for the strut clearance hole.

The orbiter was instrumented with 374 pressure orifices on the left wing, left side of the fuselage, vertical tail, left OMS pod and engine, left and upper MPS engine and the base. The pressures were measured using eleven Scanivalve, Inc., S-type valve modules mounted internally (a five and a six gang unit). When tested in the entry configuration, the MPS pressures were not available for measurement.

The left side of the ET was instrumented with 136 pressure orifices. These pressures were measured by means of 7 Scanivalve, Inc., S-type valve modules configured as one unit of 6 modules and one single. These valves were mounted internally in the tank. The left SRB had one gang of six S-type modules to measure 102 pressures. The right SRB was not instrumented. The pressure transducers used in the valve modules were Statham PM 131 TC differential pressure transducers, with ranges of ± 10 psid, ± 12.5 psid and ± 15 psid. Reference and calibration pressures were measured by the ARC micro manometers.

Some modifications were made to the model at the test site prior to

CONFIGURATIONS INVESTIGATED (CONTINUED)

testing. These were as follows:

1. The forward tip of the ET containing the retro rocket package (Reference NR Drawing VL78-000018) was replaced with a flush 0.90 inch radius nose (Model scale). The new nose had five pressure taps; one in the nose and four more aft of the nose on the vertical and horizontal axis on a 0.315 inch radius.
2. The ET balance cavity was enlarged by one inch on the diameter (from 5 inches to 6 inches) to provide clearance for cable routing and eliminate balance interference.
3. The clearances around both the orbiter and the SRB struts were opened to approximately 1/8 inch to prevent interference.
4. An alternate rudder hinge pin was provided to give a rudder deflection of +15 degrees.

Before and during the tests various model discrepancies developed or were discovered. These were generally minor and had only a negligible, if any, effect on the data. Significant discrepancies are noted below:

1. Pressure orifices P171 and P173 on the OMS pod base were omitted.
2. During the test certain pressure taps developed leaks or became plugged. Data from these taps are questionable and should be used with caution. Difficulties in checking may have resulted in erroneous indications of leakage. Repairs were made to correct leaking or plugged pressure instrumentation, whenever possible, as the test progressed. The following list gives those taps that were indicated as bad on the various leak and response checks:

ARC Facility	Run Nos.	Orifice numbers with questionable pressure data
11'	2-4	72, 163, 427
↓	5-118	31, 100, 123, 163, 201, 427
	119-160	16, 98, 101, 107, 333, 427
↓	161-170	16, 98, 101, 107, 333, 427 + 306, 307, 327, 328, 336, 337, 356, 357, 375

CONFIGURATIONS INVESTIGATED (CONCLUDED)

<u>ARC Facility</u>	<u>Run Nos.</u>	<u>Orifice numbers with questionable pressure data</u>
11'	171-182	16, 47, 53, 75, 78, 98, 107, 201, 236, 237, 238, 307, 327, 365, 427
↓	183-189	Same as (171-182) + 7, 447, 525
↓	190-211	Same as (171-182)
8'x7'	220-234	20, 21, 24, 74, 326, 327, 336, 424, 427, 752, 868, 871
↓	235-285	74, 326, 327, 336, 424, 427, 752, 868, 871
↓	286-300	74, 107, 115, 124, 129, 138, 326, 327, 336, 427
↓	301-305	74, 326, 327, 336, 427
↓	306-333	74, 326, 327, 427
9'x7'	340-396	5, 325, 326, 327, 424, 427, 526, 752, 868, 871

TEST FACILITIES DESCRIPTION

Ames 11 x 11-Ft. Transonic

The Ames 11 x 11-Foot Transonic Wind Tunnel is a variable density, closed return, continuous flow type. This tunnel has an adjustable nozzle (two flexible walls) and a slotted test section to permit transonic testing over a Mach number range continuously variable from 0.4 to 1.4.

Ames 8 x 7-Ft. Supersonic

The Ames 8 x 7-Foot Supersonic Wind Tunnel is a closed-return, variable-density tunnel with a 8- by 7-foot rectangular test section. The nozzle has flexible side walls with fixed upper and lower surfaces. Mach number range is continuously variable from 2.45 to 3.5. Tunnel stagnation pressure can be varied from 0.3 to 2.0 atmospheres and Reynolds number per foot varies from 1.0×10^6 to 5.0×10^6 .

Ames 9 x 7-Ft. Supersonic

The Ames 9 x 7-Foot Supersonic Wind Tunnel is a variable density, continuous flow type with an adjustable nozzle to permit supersonic testing over a Mach number range continuously variable from 1.5 to 2.5. The nozzle is of the asymmetric, sliding-block type in which the variation of the test section Mach number is achieved by translating, in the streamwise direction, the fixed-contour block that forms the floor of the nozzle.

DATA REDUCTION

Standard procedures were utilized to reduce force and pressure data to coefficient form. The following dimensional constants were applied:

Reference Dimensions and Constants (Model Scale)

$$S_{Ref.} = 2.421 \text{ ft}^2$$

Orbiter reference area

$$l_{Ref.} = 39.849 \text{ in.}$$

Orbiter reference length

Base Areas (Model Scale)

$$A_{BOI} = 0.1903 \text{ Ft}^2$$

Orbiter base area, integrated

$$A_{BOA} = 0.2362$$

Orbiter base area, sting mounted

$$A_{BMPSU} = 0.0417$$

Orbiter upper MPS base area

$$A_{BMPSL} = 0.0853$$

Orbiter lower MPS base area

$$A_{BACPS} = 0.0310$$

Orbiter ACPS base area on OMS pod

$$A_{BOMS} = 0.0231$$

Orbiter OMS nozzle base area

$$A_{BPOD} = 0.0257$$

Orbiter OMS pod base area

$$A_{CO} = 0.0611$$

Orbiter sting cavity base area

$$A_{BNOZ} = 0.0564$$

SRM nozzle base area

$$A_{BSKIRT} = 0.1729$$

SRM nozzle skirt base area

$$A_{BETH} = 0.3189$$

ET Base area

$$A_{CET} = 0.1964$$

ET Sting cavity base area

TEST : 0A12 / EA9		TABLE I.	DATE : May, 1973
TEST CONDITIONS			
MACH NUMBER	REYNOLDS NUMBER (per unit length)	DYNAMIC PRESSURE (pounds/sq. foot)	STAGNATION TEMPERATURE (degrees Fahrenheit)
0.6	4.0×10^6	540	120° NOM.
0.9	4.5	800	
1.1	4.0	800	
1.25	3.0	630	
1.4	3.0	650	
1.55	2.8	600	
2.0	2.3	490	
2.5	1.5	300	
3.0	2.0	350	Y
3.5	2.0	300	

FIVE (5) TASK CORPORATION BALANCES
BALANCE UTILIZED: WITH CAPACITIES AS FOLLOWS:

	ISOLATED ORBITER		INTEGRATED VEHICLE		
	MARK IIA	MARK IIB	ORB MARK III	SRB MARK II	ET MARK IIB
NF	3000	3000	2400	1250	4000
NA	3000	3000	2400	1250	4000
YF	1500	1500	1200	500	2000
YA	1500	1500	1200	500	2000
X	600	600	1000	200	1000
R	4000	4000	4000	1000	10,000
SIZE	2.5"	2.5"	2.5"	1.5"	4.0"

COMMENTS: THE MARK IIA, 2.5N. DIA. BALANCE WAS
DAMAGED AFTER RUN 319. THE MARK IIB WAS
SUBSTITUTED FOR RUN 320 AND SUBSEQUENT RUNS

TABLE II.

TEST: ARC 11-707 (11-707)										DATE: 4-27-75																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
DATA SET/RUN NUMBER COLLATION SUMMARY																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
DATA SET IDENTIFIER	CONFIGURATION	SCHD.	PARAMETERS/VALUES						NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE)					TEST RUN NUMBERS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
			α	β	δ_e	δ_r	δ_{pr}	L_0		0.6	0.9	1.1	1.25	1.4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							

TABLE II. CONTINUED

TEST: ARC - 11-707(IA 92)										DATE:												
DATA SET/RUN NUMBER COLLATION SUMMARY																						
DATA SET IDENTIFIER	CONFIGURATION	SCHD. PARAMETERS/VALUES					NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE)					TEST RUN NUMBERS									
		α	β	δe	δR	δFR		δ_0	0.6	0.9	1.1	1.25										
RBMx 19	$\phi_{2A} + S_3 + T_7$	6	C	0	-5	0	0.5	2				115	114									
20		8	T	T	-5	T	T	T				101	106									
21		-8			-10							60	69									
22		-6			T							61	70									
23		-4										62	71									
24		-2										63	72									
25		0										64	73									
26		2										65	74									
27		4										66	75									
28		6										67	76									
29		8										68	77									
30		-8			-15							78	88									
31		-6			T							79	89									
32		-4										80	90									
33		-2										81	91									
34		0										82	92									
35		2										83	93									
36		4										84	94									
1																						
					</																	

TABLE II. CONTINUED

TEST: ARC 11-707(IA94)										DATE: ..													
DATA SET/RUN NUMBER COLLATION SUMMARY																							
DATA SET IDENTIFIER		CONFIGURATION		SCHD. PARAMETERS/VALUES				NO. OF RUNS		MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE)					TEST RUN NUMBERS								
		α	β	δe	δR	δFR	δe	δR	δFR	δe	0.6	0.9	1.1	1.25									
RBMx 37		6	C	0	-15	0	0.5	2					85	95									
38		8	T	-15	T	T	T	T					87	96									
39		-8		-5									50	55									
40		-4		T									51	56									
41		0											52	57									
42		4											53	58									
43		8											54	59									
44		A	0		0		-1.2	4	107	108	109	110											

DATE 5-17-73

-OFFICIALS-

TEST: AR 47-2001A961 DATE: 5-1-63

DATA SET RUN NUMBER COLLATION SUMMARY

TEST RUN NUMBER	SCHED.	PARAMETER VALUES				NO. OF RE RUNS	VAC. NUMBER IN A TEST			
		α	β	δe	δR	δO	1.55	2.0		
PR017	0	0	0	0	-10	0.5	375	381		
20	4	4	T	T	T	T	376	382		
21	6	6	T	T	T	T	377	383		
22	8	8	T	T	T	T	378	384		
23	-8	-8	T	T	T	T	385	391		
24	-4	-4	T	T	T	T	386	392		
25	0	0	T	T	T	T	387	393		
26	4	4	T	T	T	T	388	394		
27	6	6	T	T	T	T	389	395		
28	8	8	T	T	T	T	390	396		

TEST RUN NUMBER	SCHED.	PARAMETER VALUES				NO. OF RE RUNS	VAC. NUMBER IN A TEST			
		α	β	δe	δR	δO	1.55	2.0		
1	7	7	T	T	T	T				
2	13	13	T	T	T	T				
3	19	19	T	T	T	T				
4	25	25	T	T	T	T				
5	31	31	T	T	T	T				
6	37	37	T	T	T	T				
7	43	43	T	T	T	T				
8	49	49	T	T	T	T				
9	55	55	T	T	T	T				
10	61	61	T	T	T	T				
11	67	67	T	T	T	T				
12	73	73	T	T	T	T				
13	79	79	T	T	T	T				
14	85	85	T	T	T	T				
15	91	91	T	T	T	T				
16	97	97	T	T	T	T				
17	103	103	T	T	T	T				
18	109	109	T	T	T	T				
19	115	115	T	T	T	T				
20	121	121	T	T	T	T				
21	127	127	T	T	T	T				
22	133	133	T	T	T	T				
23	139	139	T	T	T	T				
24	145	145	T	T	T	T				
25	151	151	T	T	T	T				
26	157	157	T	T	T	T				
27	163	163	T	T	T	T				
28	169	169	T	T	T	T				
29	175	175	T	T	T	T				
30	181	181	T	T	T	T				
31	187	187	T	T	T	T				
32	193	193	T	T	T	T				
33	199	199	T	T	T	T				
34	205	205	T	T	T	T				
35	211	211	T	T	T	T				
36	217	217	T	T	T	T				
37	223	223	T	T	T	T				
38	229	229	T	T	T	T				
39	235	235	T	T	T	T				
40	241	241	T	T	T	T				
41	247	247	T	T	T	T				
42	253	253	T	T	T	T				
43	259	259	T	T	T	T				
44	265	265	T	T	T	T				
45	271	271	T	T	T	T				
46	277	277	T	T	T	T				
47	283	283	T	T	T	T				
48	289	289	T	T	T	T				
49	295	295	T	T	T	T				
50	301	301	T	T	T	T				
51	307	307	T	T	T	T				
52	313	313	T	T	T	T				
53	319	319	T	T	T	T				
54	325	325	T	T	T	T				
55	331	331	T	T	T	T				
56	337	337	T	T	T	T				
57	343	343	T	T	T	T				
58	349	349	T	T	T	T				
59	355	355	T	T	T	T				
60	361	361	T	T	T	T				
61	367	367	T	T	T	T				
62	373	373	T	T	T	T				
63	379	379	T	T	T	T				
64	385	385	T	T	T	T				
65	391	391	T	T	T	T				
66	397	397	T	T	T	T				
67	403	403	T	T	T	T				
68	409	409	T	T	T	T				
69	415	415	T	T	T	T				
70	421	421	T	T	T	T				
71	427	427	T	T	T	T				
72	433	433	T	T	T	T				
73	439	439	T	T	T	T				
74	445	445	T	T	T	T				
75	451	451	T	T	T	T				
76	457	457	T	T	T	T				
77	463	463	T	T	T	T				
78	469	469	T	T	T	T				
79	475	475	T	T	T	T				
80	481	481	T	T	T	T				
81	487	487	T	T	T	T				
82	493	493	T	T	T	T				
83	499	499	T	T	T	T				
84	505	505	T	T	T	T				
85	511	511	T	T	T	T				
86	517	517	T	T	T	T				
87	523	523	T	T	T	T				
88	529	529	T	T	T	T				
89	535	535	T	T	T	T				
90	541	541	T	T	T	T				
91	547	547	T	T	T	T				
92	553	553	T	T	T	T				
93	559	559	T	T	T	T				
94	565	565	T	T	T	T				
95	571	571	T	T	T	T				
96	577	577	T	T	T	T				
97	583	583	T	T	T	T				
98	589	589	T	T	T	T				
99	595	595	T	T	T	T				
100	601	601	T	T	T	T				

α OR β
SCHEDULES

COEFFICIENTS

DEAR 13

2

TABLE II. CONTINUED

DATE: 5-1-73

DATA SET/BIIN NUMBER COLLATION SUMMARY

TEST: AEC 8x7-707 (JA9C)

[illegible]

TABLE II. CONTINUED

DATE. 5-1-73

DATA SET, RUN NUMBER COLLATION SUMMARY

TEST: AEC 8x7-707 (IA9C)

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES				NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE)					TEST RUN NUMBERS
		α	β	δe	δR	δF	i_0		2.5	3.0	3.5			
RBK 17	$\phi_{2A} + S_3 + T_9$	-8	C	0	-10	0	0.5	3		274	280*	268		
18		-4	T	T	T	T	T	T		275	281*	269		
19		0								276	282*	270		
20		4								277	283*	271		
21		6								278	284*	272		
22		8								279	285*	273		

TABLE II. CONTINUED

DATE: 4-23-73

DATA SET/RUN NUMBER COLLATION SUMMARY

TEST: AMES 11-707 (0A12A)

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES			NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE)	
		α	β	δe	δR	δFR		0.6	0.9
RBPC01	B ₁₀ C ₅ D ₇ N ₂ F ₁ M ₉ N ₀ V ₅ R ₃ W ₀ F ₁₀	A	0	0	0	0	2	119	125
02		0	B	T	T	T	T	120	126
03		5	T	T	T	T	T	121	127
04		10	T	T	T	T	T	122	128
05		15	T	T	T	T	T	123	129
06		20	T	T	T	T	T	124	130
07		0	C	T	-10	T	T	131	136
08		5	T	T	T	T	T	132	137
09		10	T	T	T	T	T	133	138
10		15	T	T	T	T	T	134	139
11		20	T	T	T	T	T	135	140
12		0	T	T	-20	T	T	141	146
13		5	T	T	T	T	T	142	147
14		10	T	T	T	T	T	143	148
15		15	T	T	T	T	T	144	149
16		20	T	T	T	T	T	145	150
17		0	D	10	0	T	T	151	156
18		5	D	10	0	T	T	152	160

α OR β SCHEDULES

$\alpha A = \text{MAX}, 0, 5, 10, 15, 20, 25$

$\beta B = -10, -5, 5, 10$

COEFFICIENTS

$\beta C = 8, -4, 0, 4, 8$

$\beta D = -10, 0, 10$

$\beta E = -5, 0, 5$

TEST RUN NUMBERS

75 76

67

61

55

49

43

37

31

25

19

13

7

IDVAR (1)

IDVAR (2)

IDV

TABLE II. CONTINUED

DATE: 4-23-73

DATA SET/RUN NUMBER COLLATION SUMMARY

TEST : AMES 11-707 (0A12A)

DATA SET IDENTIFIER		CONFIGURATION	SCHD.		PARAMETERS/VALUES				NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE)				TEST RUN NUMBERS
			α	β	δe	δR	δFR	0.6		0.9				
RBPx19		B ₁₀ C ₅ D ₁ N ₂ E ₄ M ₃ V ₈ R ₃ W ₈ E ₁₀	10	D	+10	0	0	2	153	157				
20			15	T	T	T	T	T	154	159				
21			20	T	T	T	T	T	155	158				
22			0	C	-10				161	166				
23			5	T	T				162	167				
24			10	T	T				163	168				
25			15	T	T				164	169				
26			20	T	T				165	170				
27			-4	E	-20				171	182				
28			0	C					172	181				
29			5	T	T				173	180				
30			10	T	T				174	179				
31			15	T	T				175	178				
32			20	T	T				176	177				
33			-4	E	0	0	40		183	189				
34			0	C	T	T	T		184	190				
35			5	T	T	T	T		185	191				
36			10	T	T	T	T		186	192				
													75 76	
													1 7 13 19 25 31 37 43 49 55 61 67 73 76	
													NDV	
													IDVAR (1)	
													IDVAR (2)	
													$\beta C = -8, -4, 0, 4, 8$	
													$\beta D = -10, 0, 10$	
													$\beta E = -5, 0, 5$	
													α OR β SCHEDULES	
													$\alpha A = -MAX, 0, 5, 10, 15, 20, 25$	
													$\beta B = -10, -5, 5, 10$	

TABLE II. CONTINUED

DATE: 4-23-73

DATA SET/RUN NUMBER COLLATION SUMMARY

TEST: AMES 11-707 (0A12A)

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES			NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE)						TEST RUN NUMBERS
		α	β	δ_e	δ_R	δ_{FR}		0.6	0.9	1.1	1.25	1.4		
RBPx37	B ₀ G ₀ H ₀ I ₀ J ₀ K ₀ L ₀ M ₀ N ₀ O ₀ P ₀ Q ₀ R ₀ S ₀ T ₀ U ₀ V ₀ W ₀ X ₀ Y ₀ Z ₀	15	C	0	0	40		187	193					
38		20	C			40		188	194					
39		F	O			0				199	197	195		
40		0.5	G							200	198	196		
41		-4	E			-10		201	202					
42		-4	E			-20		203	204					
43		-4	E			0		205	206					
44		-4	E			-10		207	208					
45		-4	E			0		210	209					
46		H	O					216	211					
47		-5	I					215	212					
48		-10	I					214	213					
														</

TABLE II. CONTINUED

TEST: 87-707 (0A12C)		DATA SET/RUN NUMBER COLLATION SUMMARY														DATE: 5-9-73																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES				NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE)		TEST RUN NUMBERS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
		α	β	δ_e	δ_r	δ_{er}	δ_{fr}		2.5	3.5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
RBQx01	B10C ₁ D ₁ N ₁ E ₁ M ₁ N ₁ V ₁ R ₁ G ₁ W ₁ F ₁	A	0	0	0	0	40	2	290	286																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						

TABLE II. CONCLUDED

DATE: 5-9-73

DATA SET/RUN NUMBER COLLATION SUMMARY

TEST: 87-707 (ΦA12C)

[illegible]

TABLE III. MODEL COMPONENT DIMENSIONAL DATA

MODEL COMPONENT: E10 BodyGENERAL DESCRIPTION: Fuselage, 2A Configuration, Lightweight Orbiter, perRockwell Lines VL70-000089 "B."Scale Model = .030DRAWING NUMBER:VL70-000089 "B"
VL70-000092, 93, 94 "A"DIMENSIONS:FULL-SCALEMODEL SCALE

Length ~ IN

1328.339.8490Max. Width ~ IN (@X₀ = 1528.3)265.07.9500Max. Depth ~ IN. (@X₀ = 1480.52)248.07.4400

Fineness Ratio

5.0125.012Area ~ ft²

Max. Cross-Sectional

456.4.41076

Planform

Wetted

Base

TABLE III. (CONTINUED)

MODEL COMPONENT: Canopy - C5GENERAL DESCRIPTION: 2A Configuration per Lines VL70-000092Scale Model = .030DRAWING NUMBER: VL70-000092

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Length (STA FWD Bulkhead)	<u>391.0</u>	<u>11.730</u>
Max. Width (T.E. Bulkhead)	<u>560.0</u>	<u>16.800</u>
Max. Depth (WP = 42.9 22 to = 500)	<u> </u>	<u> </u>
Fineness Ratio	<u> </u>	<u> </u>
Area	<u> </u>	<u> </u>
Max. Cross-Sectional	<u> </u>	<u> </u>
Planform	<u> </u>	<u> </u>
Wetted	<u> </u>	<u> </u>
Base	<u> </u>	<u> </u>

TABLE III. (CONTINUED)

MODEL COMPONENT: Manipulator Housing D-7

GENERAL DESCRIPTION: 2A Configuration per Rockwell Lines VL70-000093

Scale Model = .030

DRAWING NUMBER: VL70-000093

DIMENSIONS:

FULL-SCALE

MODEL SCALE

Length ~ IN.

881.00

26.430

Max. Width ~ IN.

51.00

1.530

Max. Depth ~ IN.

23.00

.690

Fineness Ratio

Area

Max. Cross-Sectional

Planform

Wetted

Base

W Fuselage

BP = 0.00

WP = 500.0 IN. FS

X.426.0 to 1307.0 IN. FS

TABLE III. (CONTINUED)

MODEL COMPONENT: WING-W87 New Light Weight OrbiterGENERAL DESCRIPTION: Orbiter Configuration Per Lines VL70-000093.NOTE: (Dihedral Angle is defined at the lower surface of the Wing at the 75.33% element line projected into a plane perpendicular.Scale Model = .030TEST NO.DWG. NO. VL70-000093DIMENSIONS:FULL-SCALEMODEL SCALETOTAL DATA

Area (Theo.)	Ft ²	2690.00	2.42100
Planform		936.68	28.10040
Span (Theo)	In.	2.265	2.265
Aspect Ratio		1.177	1.177
Rate of Taper		0.200	0.2000
Taper Ratio		3.5000	3.500
Dihedral Angle, degrees		3.000	+3.00
Incidence Angle, degrees		3.500	+3.000
Aerodynamic Twist, degrees			
Sweep Back Angles, degrees		45.00	45.00
Leading Edge		-10.24	-10.24
Trailing Edge		35.209	35.209
0.25 Element Line			
Chords:		689.24	20.67720
Root (Theo) B.P.O.O.		137.85	4.13550
Tip, (Theo) B.P.	46834	474.81	14.24430
MAC		1136.89	34.10670
Fus. Sta. of .25 MAC		299.20	8.97840
W.P. of .25 MAC		182.13	5.46390
B.L. of .25 MAC			
183.13			
<u>EXPOSED DATA</u>		1752.29	1.57706
Area (Theo)	Ft ²	720.68	21.62040
Span, (Theo)	In. BP108 to 468.341	2.058	2.058
Aspect Ratio		.2451	.2451
Taper Ratio			
Chords		562.40	16.8720
Root BP108		137.85	4.13550
Tip 1.00 $\frac{b}{2}$		393.03	11.79090
MAC		1185.31	35.55930
Fus. Sta. of .25 MAC		300.207	9.00621
W.P. of .25 MAC		143.76	4.31280
B.L. of .25 MAC			
Airfoil Section (Rockwell Mod NASA)			
XXXX-64		.10	.10
Root $\frac{b}{2}$ = .425			
Tip $\frac{b}{2}$ = 1.00		.12	.12
Data for (1) of (2) Sides			
Leading Edge Cuff		120.33	10830
Planform Area	Ft ²	560.0	16.80
Leading Edge Intersects Fus M. L. @ Sta		1035.0	31.050
Leading Edge Intersects Wing @ Sta			

TABLE III. (CONTINUED)

MODEL COMPONENT: Elevon E-18GENERAL DESCRIPTION: 2A Configuration Per W-87 Rockwell Lines VL 70-000093Data for (1) of (2) SidesScale Model = .030DRAWING NUMBER:VL 70-000093DIMENSIONS:

	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Area ~ ft^2	<u>205.52</u>	<u>.18497</u>
Span (equivalent) ~ IN.	<u>353.34</u>	<u>10.60020</u>
Inb'd equivalent chord	<u>114.78</u>	<u>3.44340</u>
Outb'd equivalent chord	<u>55.00</u>	<u>1.6500</u>
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	<u>.208</u>	<u>.208</u>
At Outb'd equiv. chord	<u>.400</u>	<u>.400</u>
Sweep Back Angles, degrees		
Leading Edge	<u>0.00</u>	<u>0.00</u>
Tailing Edge	<u>-10.24</u>	<u>-10.24</u>
Hingeline	<u>0.00</u>	<u>0.00</u>
Area Moment (Normal to hinge line) ft^3	<u>1548.07</u>	<u>.04180</u>
Product of Area Moment		

TABLE III. (CONTINUED)

MODEL COMPONENT: VERTICAL - V5 (Light Weight Orbiter Configuration)GENERAL DESCRIPTION: Centerline Vertical Tail, Double Wedge Airfoil with Rounded Leading EdgeScale Model = .030DRAWING NUMBER:VL70-000095DIMENSIONS:FULL-SCALEMODEL SCALETOTAL DATA

Area (Theo) Ft ²	<u>413.25</u>	<u>.37192</u>
Planform		
Span (Theo) In	<u>315.72</u>	<u>9.47160</u>
Aspect Ratio	<u>1.675</u>	<u>1.675</u>
Rate of Taper	<u>0.507</u>	<u>0.507</u>
Taper Ratio	<u>.404</u>	<u>.404</u>
Sweep Back Angles, degrees		
Leading Edge	<u>45.000</u>	<u>45.000</u>
Trailing Edge	<u>26.249</u>	<u>26.249</u>
0.25 Element Line	<u>41.130</u>	<u>41.130</u>
Chords:		
Root (Theo) WP	<u>268.50</u>	<u>8.05500</u>
Tip (Theo) WP	<u>108.47</u>	<u>3.25410</u>
MAC	<u>199.81</u>	<u>5.99430</u>
Fus. Sta. of .25 MAC	<u>1463.50</u>	<u>43.90500</u>
W. P. of .25 MAC	<u>635.522</u>	<u>19.06566</u>
B. L. of .25 MAC	<u>0.00</u>	<u>0.00</u>
Airfoil Section		
Leading Wedge Angle Deg	<u>10.000</u>	<u>10.000</u>
Trailing Wedge Angle Deg	<u>14.920</u>	<u>14.920</u>
Leading Edge Radius IN.	<u>2.00</u>	<u>.06</u>
Void Area Ft ²	<u>13.17</u>	<u>.01185</u>
Blanketed Area Ft ²	<u>12.67</u>	<u>.01140</u>

TABLE III. (CONTINUED)

MODEL COMPONENT: R-5 Rudder

GENERAL DESCRIPTION: 2A Configuration per Rockwell Lines VL 70-000095

Scale Model = .030

DRAWING NUMBER: VL 70-000095

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Area ~ Ft ²	<u>106.38</u>	<u>.09574</u>
Span (equivalent) ~ IN.	<u>201.0</u>	<u>6.030</u>
Inb'd equivalent chord	<u>91.585</u>	<u>2.74755</u>
Outb'd equivalent chord	<u>50.833</u>	<u>1.52499</u>
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	<u>0.400</u>	<u>0.400</u>
At Outb'd equiv. chord	<u>0.400</u>	<u>0.400</u>
Sweep Back Angles, degrees		
Leading Edge	<u>34.83</u>	<u>34.83</u>
Tailing Edge	<u>26.25</u>	<u>26.25</u>
Hingeline	<u>34.83</u>	<u>34.83</u>
Area Moment (Normal to hinge line) ~ Ft ³	<u>526.13</u>	<u>.01421</u>
Product of Area and Mean Chord		

TABLE III. (CONTINUED)

MODEL COMPONENT: OMS Pod -M3GENERAL DESCRIPTION: 2A Light Weight Configuration per Rockwell LinesVL70-000094AScale Model = .030DRAWING NUMBER:VL70-000094ADIMENSIONS:FULL-SCALEMODEL SCALE

Length

346.010.380Max. Width $X_{\perp} = 1450.0$ 108.03.240Max. Depth $X_o = 1500.0$ 113.03.390

Fineness Ratio

Area

Max. Cross-Sectional

Planform

Wetted

Base

L of OMS Pod

WP = 463.9 IN. FS WP 400 + 63.9 = 463.9

BP = 80.0 IN. FS

Length 1214.0 to 1560.0' = 346.0 IN. FS

TABLE III. (CONTINUED)

MODEL COMPONENT: FL Body Flap

GENERAL DESCRIPTION: 2A Configuration per Rockwell Lines VL70-000094A

Scale Model = .030

DRAWING NUMBER: VL70-000094A

DIMENSIONS:

	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Length	<u>84.70</u>	<u>2.541</u>
Max. Width	<u>265.00</u>	<u>7.950</u>
Max. Depth	<u> </u>	<u> </u>
Fineness Ratio	<u> </u>	<u> </u>
Area ~ Ft ²		
Max. Cross-Sectional	<u> </u>	<u> </u>
Planform	<u>142.64</u>	<u>.12838</u>
Wetted	<u> </u>	<u> </u>
Base Ft ²	<u>38.65</u>	<u>.03478</u>

TABLE III. (CONTINUED)
MODEL DIMENSIONAL DATA

MODEL COMPONENT : S3-Booster Solid Rocket Motor
GENERAL DESCRIPTION : 2A Configuration Per Rockwell Lines VL77-000012
& VL72-000061 "B"
Body of Revolution; Data for (1) of (2) Sides
Scale Model = .030
DRAWING NUMBER : VL 77-000012

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length ~IN.	<u>1732.0</u>	<u>51.96</u>
Max Width (DIA) IN. BSRM Tank	<u>142.0</u>	<u>4.260</u>
Max Depth (DIA) Aft Skirt	<u>259.0</u>	<u>7.77</u>
Fineness Ratio L/D	<u>6.687</u>	<u>6.687</u>
Area ~ Ft ²	<u> </u>	<u> </u>
Max. Cross-Sectional (Aft Skirt)	<u>365.87</u>	<u>.32928</u>
Planform	<u> </u>	<u> </u>
Wetted	<u> </u>	<u> </u>
Base	<u> </u>	<u> </u>

Ref.

FC (Orbiter) = 0.00 = 747.99 IN. ET = 200.0 IN. BSRM

WP (BSRM) = WP 400(Orbiter) - 344.413 = 55.587 IN.

BP (Orbiter) = 0.00 = 243.0 IN. BSRM

TABLE III. (CONCLUDED)

MODEL COMPONENT: EXTERNAL TANK - T9

GENERAL DESCRIPTION: 2A Configuration

NOTE: T9 identical to T8 W/O retro pkg., nose w/30"R F.S.

DRAWING NUMBER

NONE

DIMENSION:

FULL SCALE

MODEL SCALE

Length - IN.

1858

55.740

Max Width (Dia) - IN.

324.0

9.720

Max Depth

Fineness Ratio L/D

5.73457

5.73457

Area - FT²

Max Cross-Sectional

572.56

0.51530

Planform

Wetted

Base

Nose, Radius, IN.

30.0

ORBITER BODY

ORBITER STATION ~ X ₀			RADIAL LOCATION θ ~ DEGREES																	
FULL	MODEL	X ₀ / l	0	20	40	55	70	90	105	110	120	135	142	150	157	162	165	169	172	180
200	6.00	0	20																	23
210	6.30	.008	21																	32
225	6.75	.019	24																	41
245	7.35	.034	33	25	26	27	28	22			30			31						50
280	8.40	.060	42	34	35	36	37	29			39			40						59
380	11.40	.136	51	43	44	45	46	38			48			49						
400	12.00	.151		52	53	54	55	56			57			58				60		
420	12.30	.158													61					
430	12.90	.173	62	63	64	65	66	67			68		73	69		70		71		72
460	13.80	.196																		
500	15.00	.226	74	75	76	77	78	79			80			81			82			83
560	16.80	.271	84		85		86	87			88			89			90			91
625	18.75	.320	92		93		94	95			96			97			98			99
725	21.75	.395	100		101		102	103			104			105			106			107
880	26.40	.512	108		109		110	111			112			113			114			115
980	29.40	.587	116		117		119	120			121			122			123			124
1080	32.40	.662			118		125	126			127			128						129
1180	35.40	.738					131	132	133		134	135		136			137			138
1245	37.35	.787			130		140	141	142		143	144		145			146			
1300	39.00	.828			139		148	149	150		151	152		153			154			
1375	41.25	.885			147		156	157	158		159	160		161			162			
1430	42.90	.926			155		164	165	166		167	168		169			170			
1480	44.40	.964	163							171	173									
1530 ^a	45.90	1.001								172	174									
1530 ^b	45.90	1.001																		

a OMS POD, INSIDE

b OMS POD, OUTSIDE

a. Orbiter body

Table IV. Pressure Orifice Locations

BODY FLAP LMR SURFACE

ORB. STA. ~ X ₀	$\theta \sim \text{DEG}$	
	FULL MODEL	0 40
1580	47.40	175 176

OMS NOZZLE

$\lambda \sim \text{IN}$ FWD BASE	$\theta \sim \text{DEG}$		
	FULL MODEL	135	180 225
10	0.30	177	178 180
20	0.60		179

LOCATION	ORIFICE NUMBERS
ORBITER BASE (INTEGRATED)	1, 2, 3, 4
LEFT MPS NOZZLE BASE	5
UPPER MPS NOZZLE BASE	6
ACTS BASE AREA ON OMS POD	7
OMS NOZZLE BASE	8
OMS POD BASE	9
ORBITER BASE (STING MOUNT)	11, 12, 13, 14
ORBITER STING CAVITY	15, 16

MPS NOZZLE

$X \sim \text{IN.}$ FWD BASE	$\theta \sim \text{DEG}$					
	0	90	135	180	225	270
25	0.75	181	182	183	184	185
50	1.50	187	188	189	190	191
75	225		193	194	195	196
						197

VERTICAL TAIL

WATER PLANE ~ Z ₀		X/C ~ THEORETICAL VERTICAL CHORD									
FULL	MODEL	7v	0	.05	.15	.30	.52	.65	.775	.90	
525	15.75	.079	400								
550	16.50	.158	L	411	412	413	414	415	416		
			R	511	512	513	514	515	516		
600	18.00	.316	L	421	422	423	424	425	426	427	
			R	521	522	523	524	525	526	527	
690	20.70	.60	L	431	432	433	434	435	436	437	
			R	531	532	533	534	535	536	537	
765	22.95	.84	L	441	442	443	444	445	446	447	
			R	541	542	543	544	545	546	547	
792	23.76	.925	L	451	452	453	454	455	456	457	
			R	551	552	553	554	555	556	557	

b. Orbiter Base, Body Flap Lower Surface, and Vertical Tail

Table IV. Continued.

ORBITER WING

ORBITER B.P. - Y			X/C - THEORETICAL WING CHORD																				
PULL	MODEL	7	-.49	-.35	-.25	-.15	-.033	0.0	.05	.15	.25	.40	.55	.60	.65	.70	.725	.75	.775	.80	.85	.90	.95
140	4.20	.299	U	201	202				203		204		205					206			207	208	209
			L	301	302				303		304		305					306			307	308	309
170	5.10	.364	U		211				212														
			L		311				312														
200	6.00	.427	U						221	222		223	224					225			226	227	228
			L				220		321	322		323	324					325			326	327	328
230	7.50	.534	U						231	232	233	234	235					236		237	238	239	240
			L					230	331	332	333	334	335					336		337	338	339	340
315	9.45	.673	U						251	252	253	254	255			256				257	258	259	260
			L					250	351	352	353	354	355			356				357	358	359	360
365	10.95	.780	U						261	262	263				264			265			266	267	268
			L					260	361	362	363				364			365			366	367	368
415	12.45	.887	U						271	272	273	274		275				276				277	278
			L					270	371	372	373	374		375				376				377	378

U - UPPER SURFACE
L - LOWER SURFACE

U - UPPER SURFACE L - LOWER SURFACE

7	X/C LOCAL WING CHORD
.299	0, .094, .229, .362, .497, .700, .834, .865, .900, .965
.364	0, .086, .246
.427	0, .083, .177, .402, .565, .760, .808, .857, .905, .953
.534	SAME AS THEORETICAL CHORD
.673	
.780	
.887	

c. Orbiter Wing
Table IV. Continued.

EXTERNAL TANK

TANK STA ~ XT			$\theta \sim \text{DEG}$									
FULL	MODEL	XT/IT	0	30	60	90	120	135	150	165	180	270
316.	9.48	0	610			614					619	620
317.7	9.53	.001	611			624	625		627		629	
400	12.00	.045	621	622	623	634	635		637	638	639	
520	15.60	.110	631	632	633	644	645		647	648	649	
640	19.20	.174	641	642	643	654	655		657	658	659	
670	20.10	.191	651	652	653	664	665		667	668	669	
710	21.30	.212	661	662	663	674	675	676	677	678	679	
750	22.50	.234	671	672	673	684	685		687	688	689	
850	25.50	.287	681	682	683	694	695	696	697	698	699	
950	28.50	.341	691	692	693	704	705		707	708	709	
1050	31.50	.395	701	702	703	714	715	716	717		719	
1150	34.50	.449	711	712	713	724	725		727	728	729	
1250	37.50	.503	721	722	723	734	735	736	737		739	
1350	40.50	.557	731	732	733	744	745		747	748	749	
1500	45.00	.637	741	742	743		755	756	757		759	
1700	51.00	.745	751	752	753		765	766	767	768		
1900	57.00	.853	761	762	763		775	776	777			
2040	61.20	.929	771	772	773	774						
STING CAVITY			601								604	
BASE			602			603						

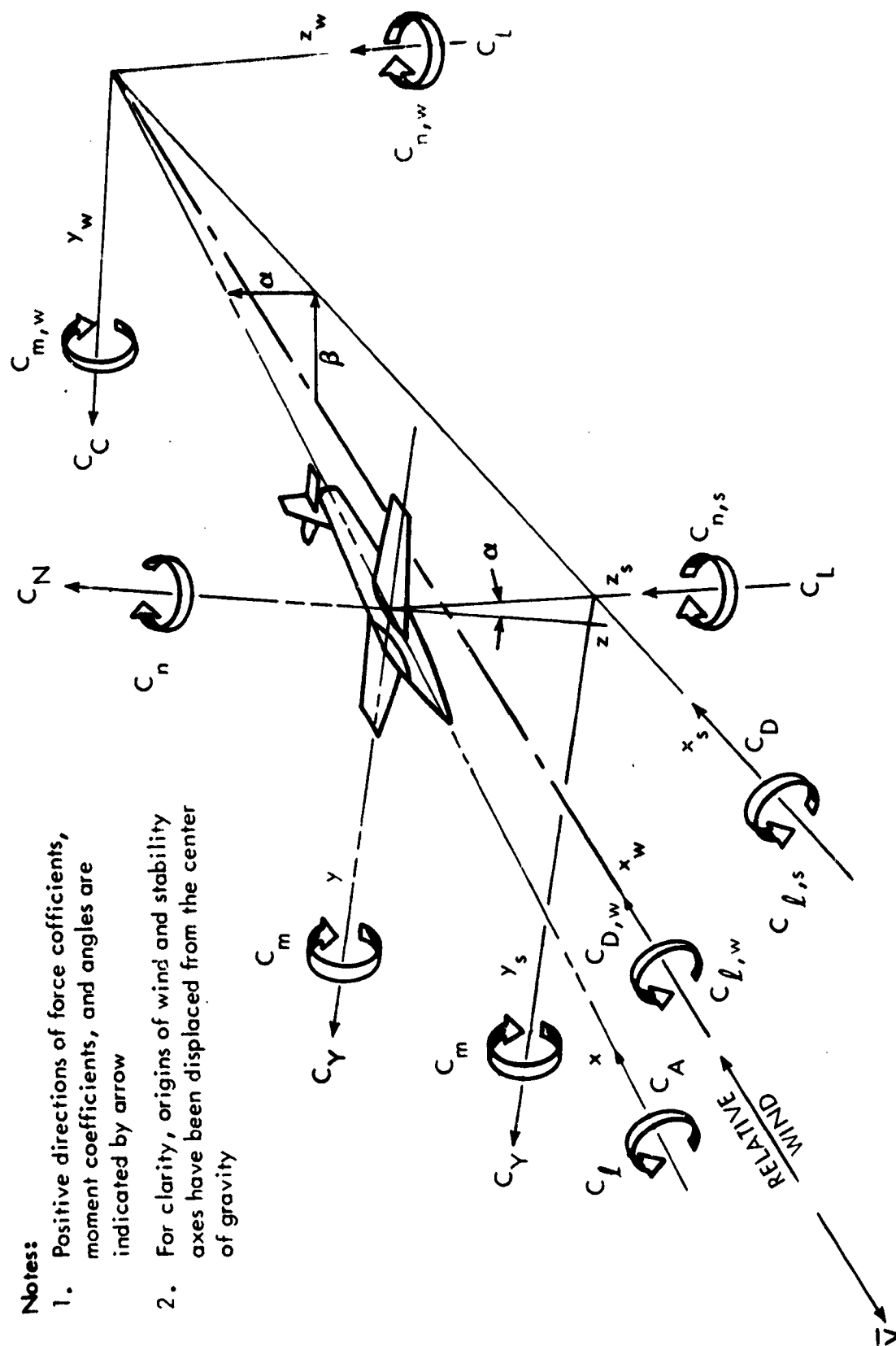
d. External Tank
Table IV. Continued.

LEFT SRM.

SRM STATION ~ XS			θ ~ DEG							
FULL	MODEL	XS/LS	0	45	90	135	180	225	270	315
200	6.00	0	810							
260	7.80	.034	811	812	813	814	815	816	817	818
370	11.10	.097	821	822	823	824	825	826	827	828
400	12.00	.114	831	832	833	834	835	836	837	838
450	13.50	.142	841	842	843	844	845	846	847	848
550	16.50	.199	851	852	853	854	855	856	857	858
700	21.00	.284	861		853		865	866	867	868
850	25.50	.370	871		873		875		877	
1050	31.50	.484	881		883		885			
1250	37.50	.597	891		893		895			
1450	43.50	.711	901		903		905		907	
1650	49.50	.825	911		913		915		917	
1750	52.50	.882	921	922	923	924	925	926	927	928
1790	53.70	.904	931	932	933	934	935	936	937	938
1850	55.50	.939	941	942	943	944	945	946	947	948
1900	57.00	.967	951	952	953	954	955	956	957	958
NOZZLE BASE			801							
SKIRT BASE			802		803		804		805	

e. Left SRM

Table IV. Concluded.

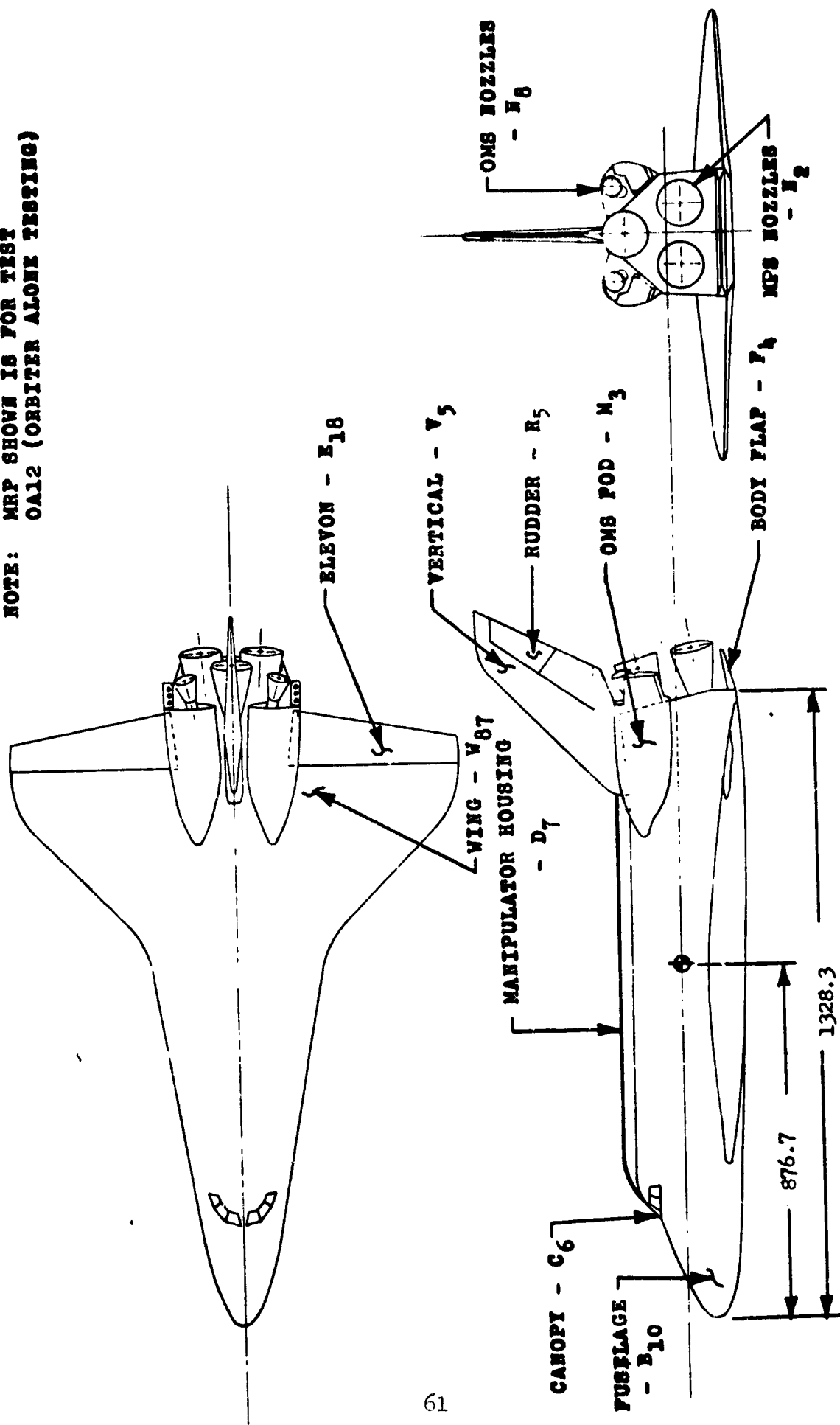


Notes:

1. Positive directions of force coefficients, moment coefficients, and angles are indicated by arrow
2. For clarity, origins of wind and stability axes have been displaced from the center of gravity

Figure 1. - Axis Systems.

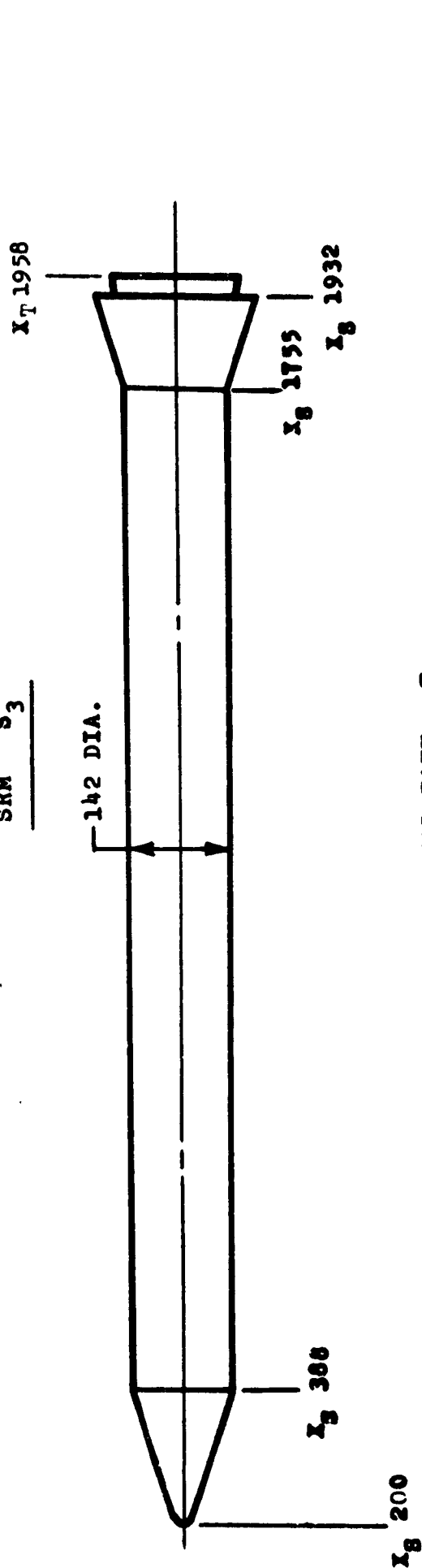
NOTE: MRP SHOWN IS FOR TEST
OAL2 (ORBITER ALONE TESTING)



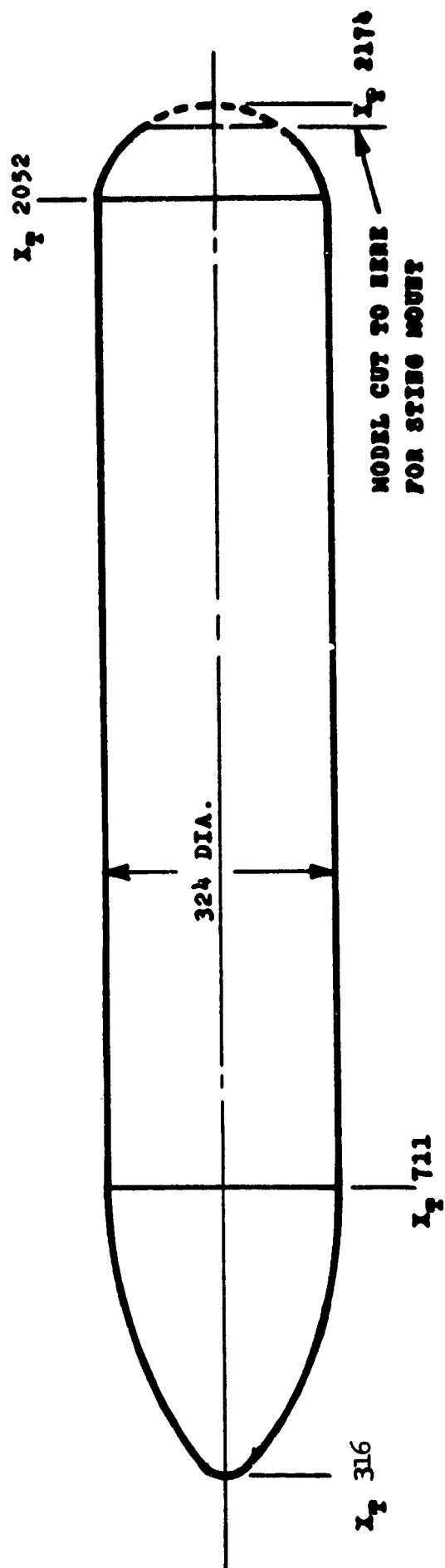
a. Orbiter, O_{2A}

Figure 2. - Model Sketches.

SRM S₃



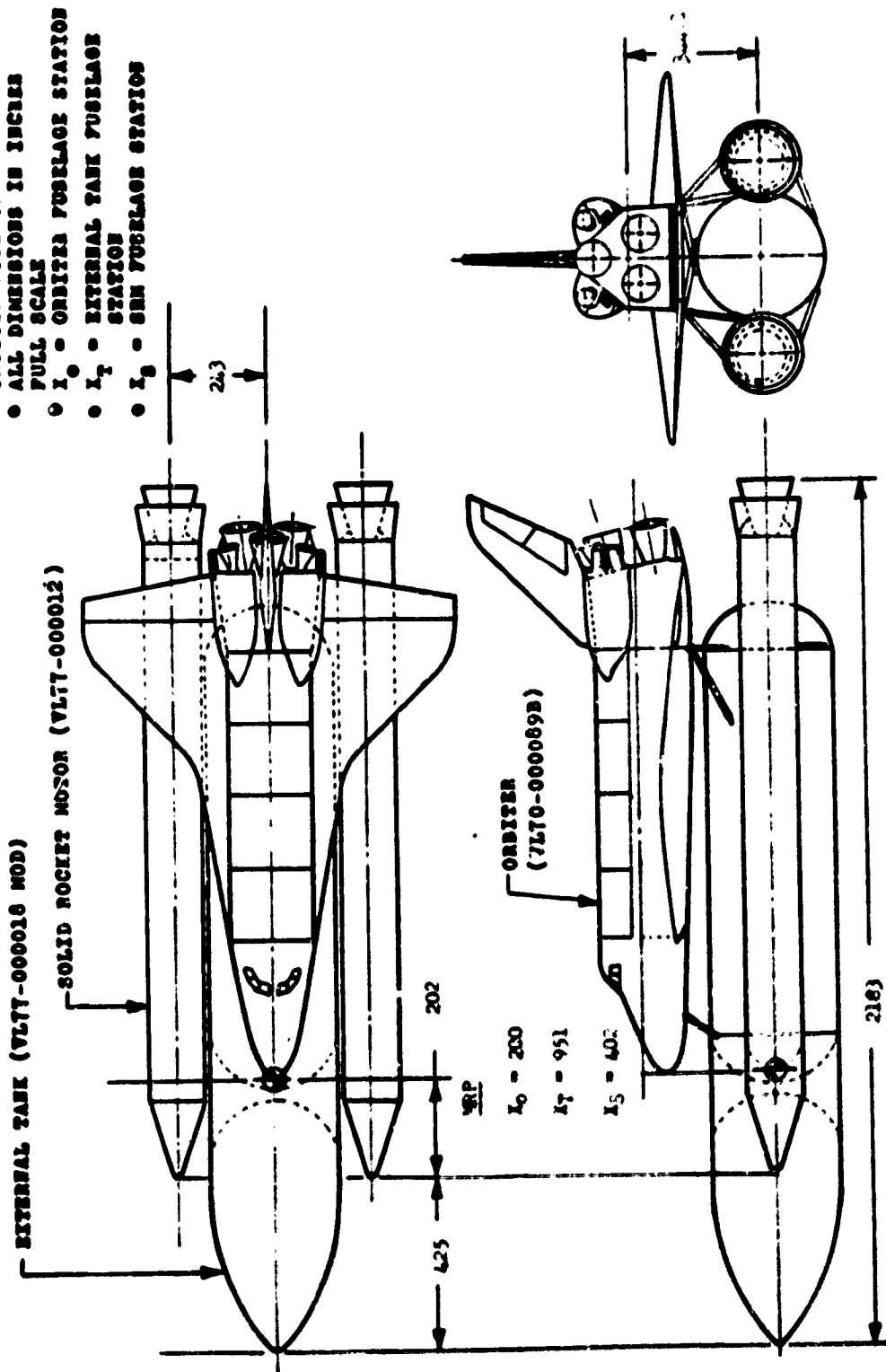
EXTERNAL TANK T₉



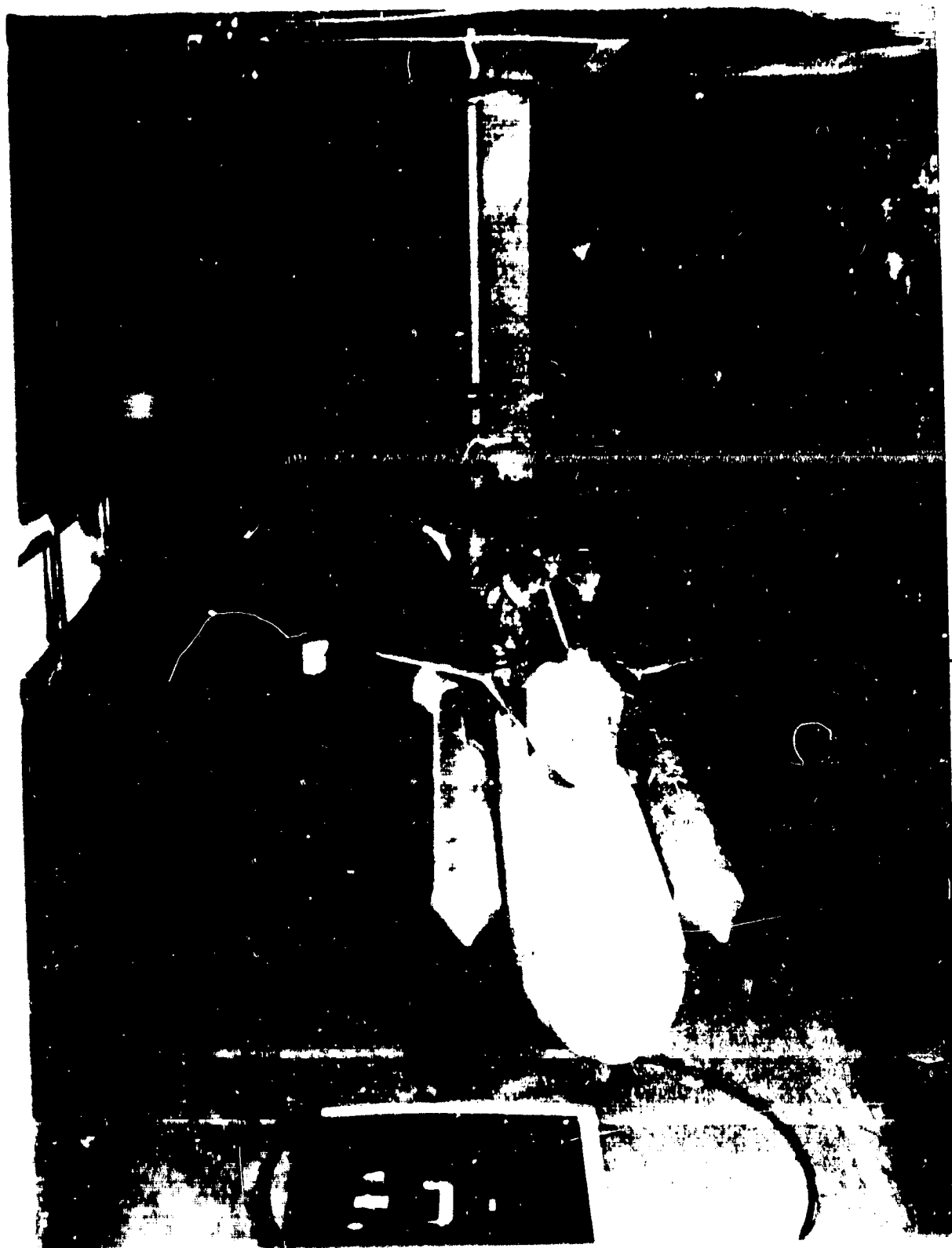
b. SRM, S₃, and External Tank, T₉

Figure 2. - Continued.

- NOTES:**
- ORBITED INCIDENCE ANGLE
RELATIVE TO TASK CL IS 0.5°
 - ORBITER ROSE UP
 - ALL DIMENSIONS IN INCHES
 - FULL SCALE
 - X_0 - ORBITER FUSELAGE STATION
 - X_T - EXTERNAL TANK FUSELAGE
STATION
 - X_S - SRM FUSELAGE STATION



c. Integrated Vehicle
Figure 5. - Concluded.





b. Isolated Orbiter (Entry Configuration) Mounted in the ARC 8x7 Ft. Tunnel

Figure 3. - Concluded.

DATA FIGURES

AMES 11-100 CA.2 U2H

SYMBOL
 ○
 □
 ◇
 △

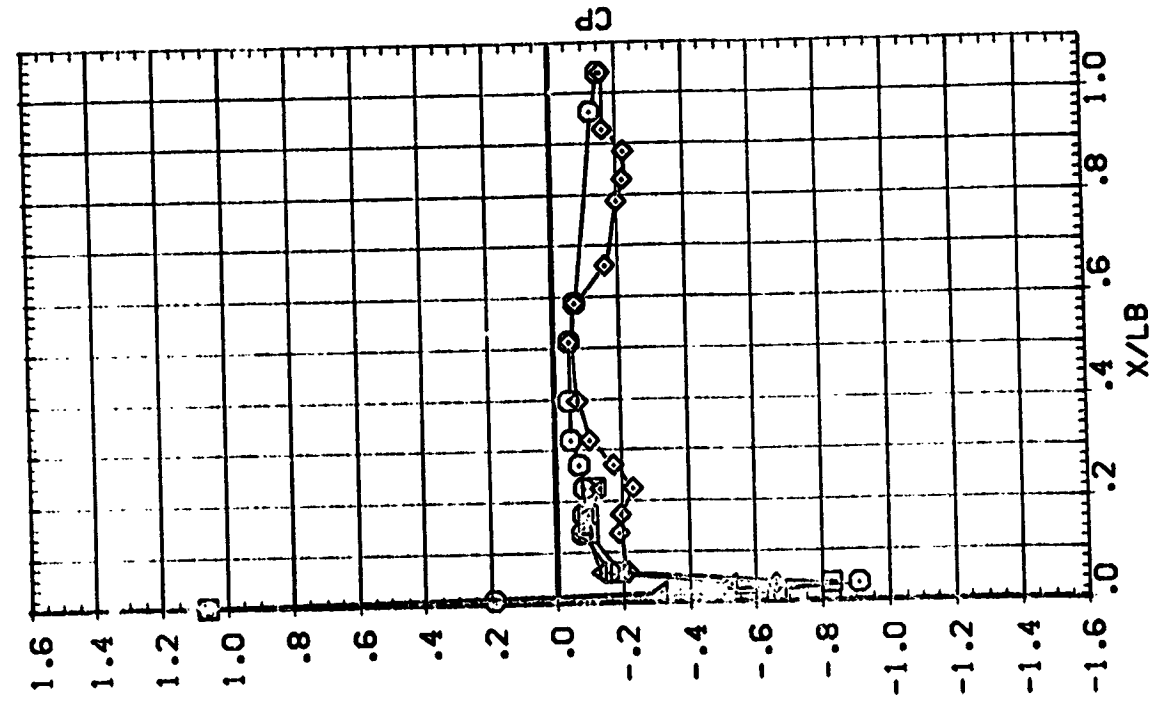
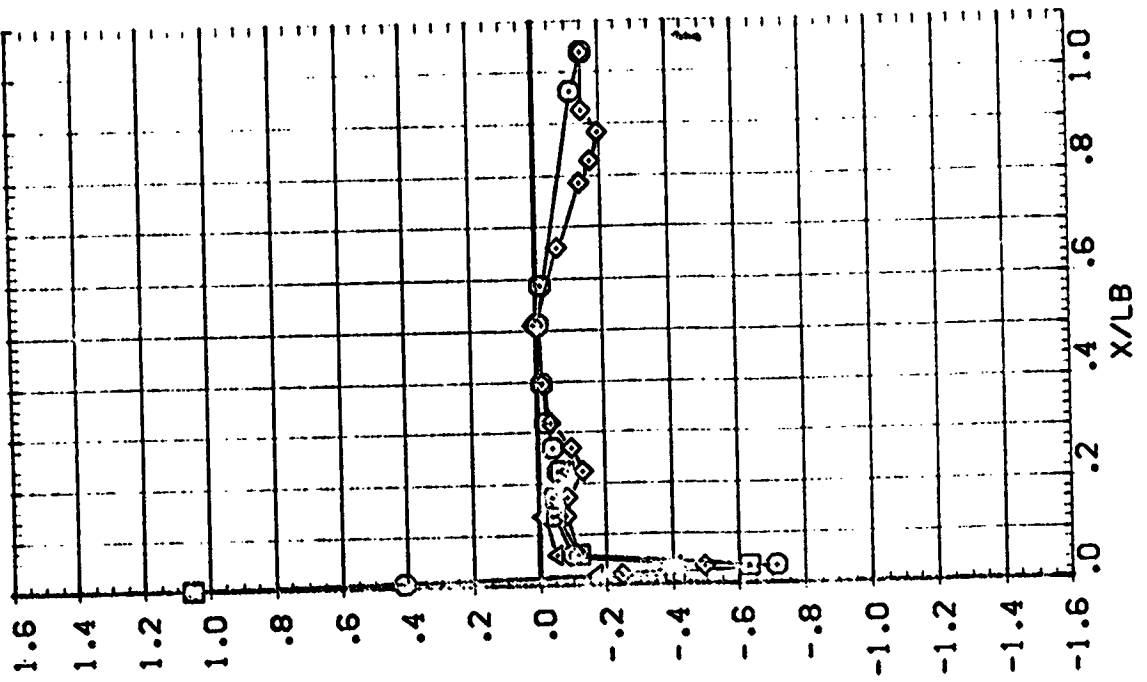
PHI
 .000
 20.000
 40.000
 55.000

ALPHA
 -4.412
 .030

MACH
 .500

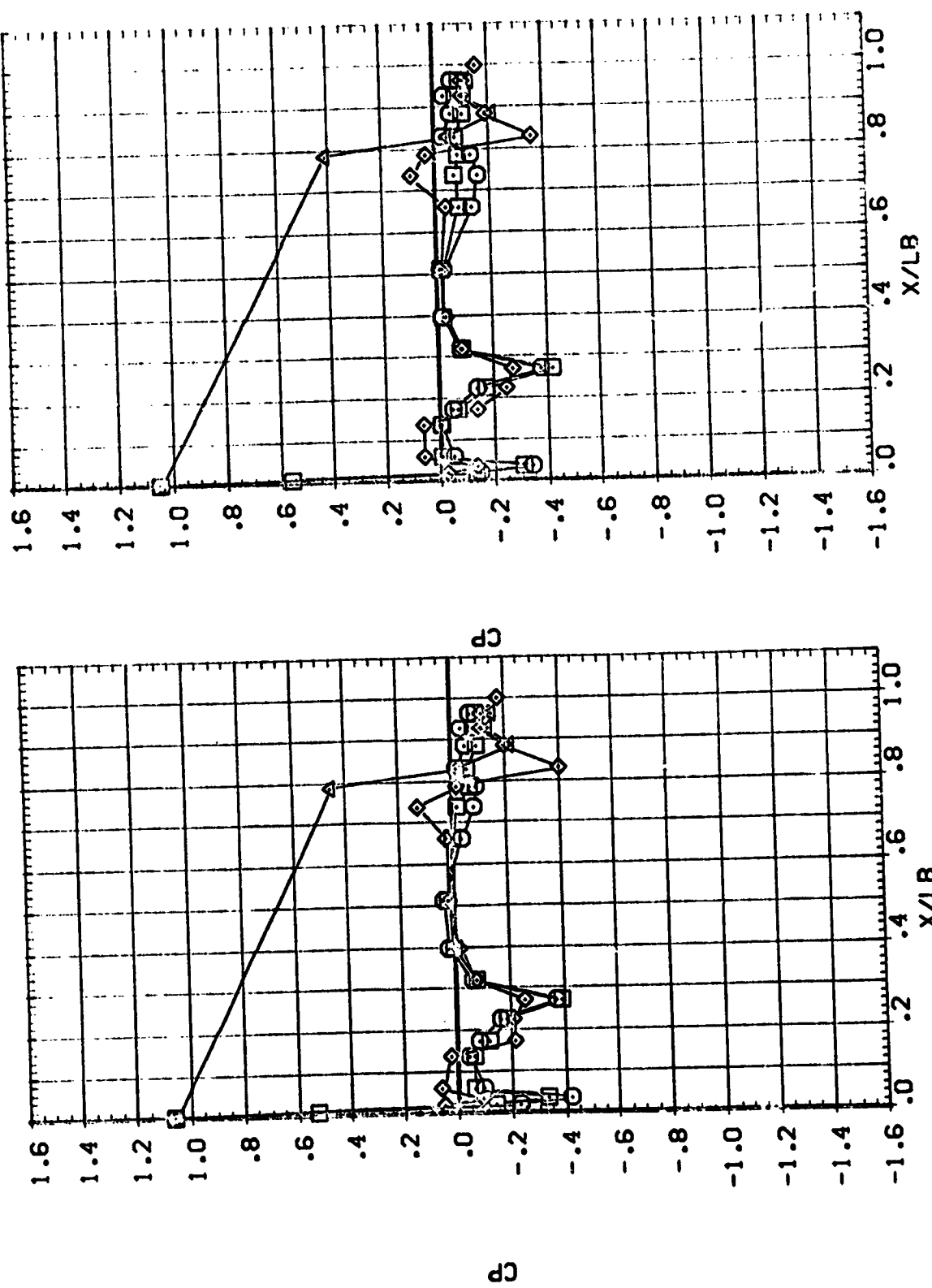
BETA
 ELEVON

PARAMETRIC VALUES
 .000 RUDLER
 .000 RUDLER
 .000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

PH1 70.000 ALPHA -4.410 MACH .603
 20.000
 120.000
 135.000
 SYMBS
 O
 I
 D
 A
 BETA ELEVON .000 .000 .000
 RUDDER RUDDFLR .000 .000 .000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBPB01)

AVES 11-707 0A12 02A

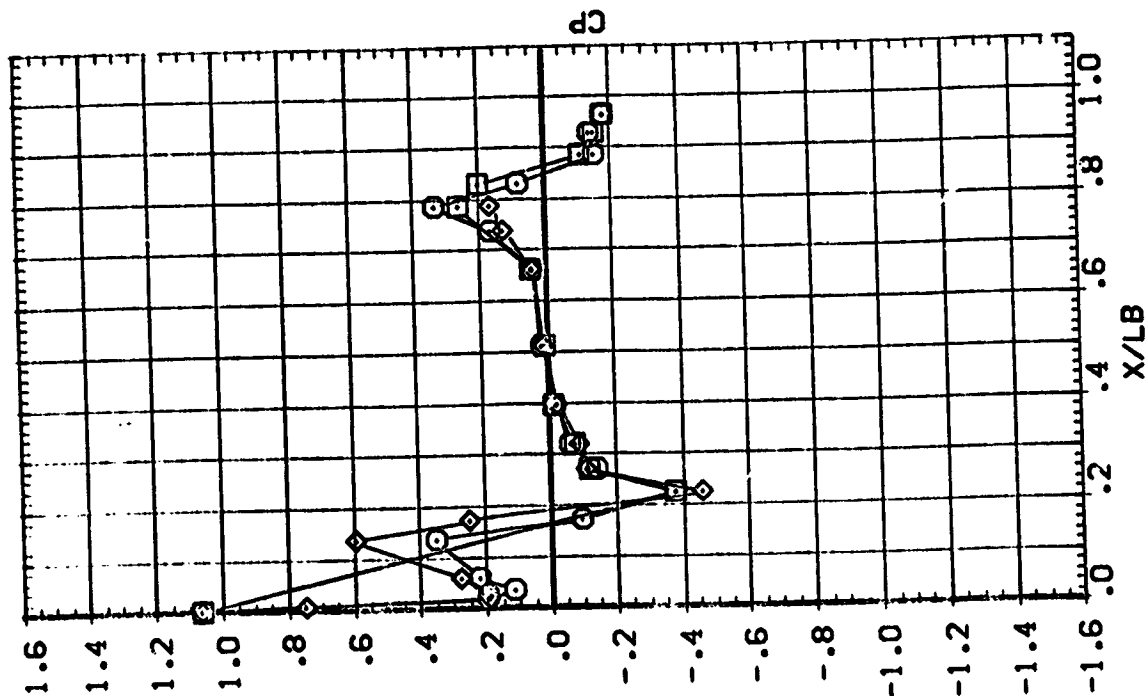
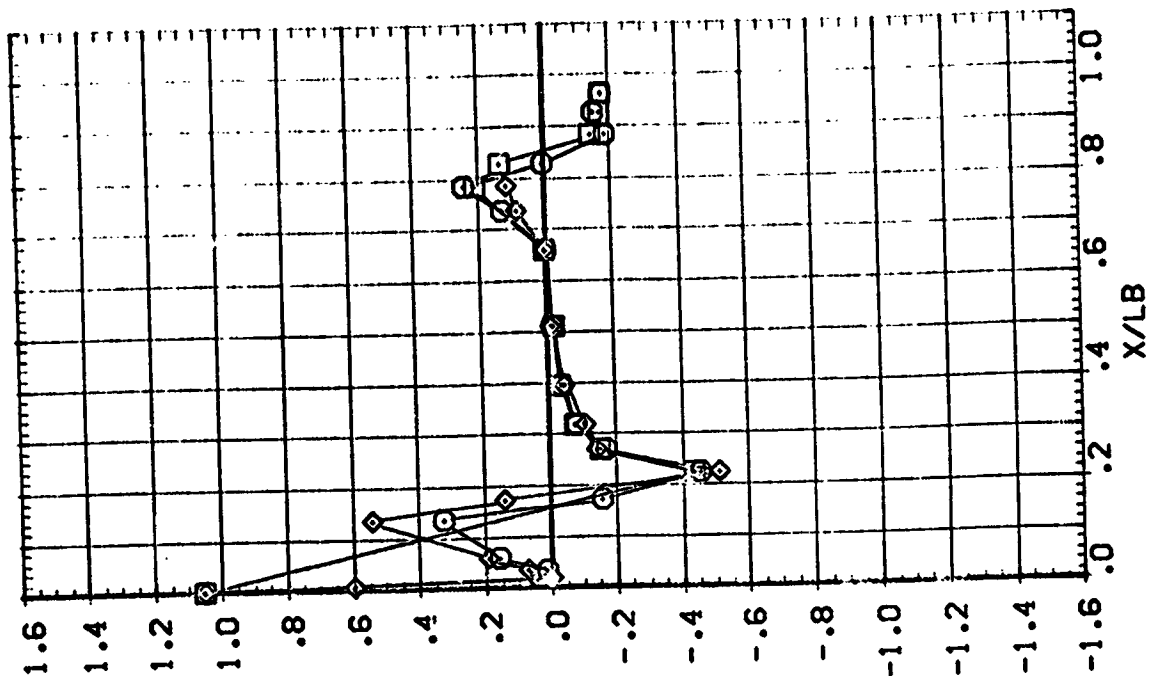
SYMBOL
 ○ □ ◇

PHI
 150.000
 165.000
 180.000

ALPHA
 -4.410
 .030

MACH
 .600

PARAMETRIC VALUES
 BETA .000
 ELEVON .000
 RUDDER .000
 RUFLR .000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBPB01)

AMES 11-7C7 0A12 02A

SYMBOL
 ○ □ ◇ △

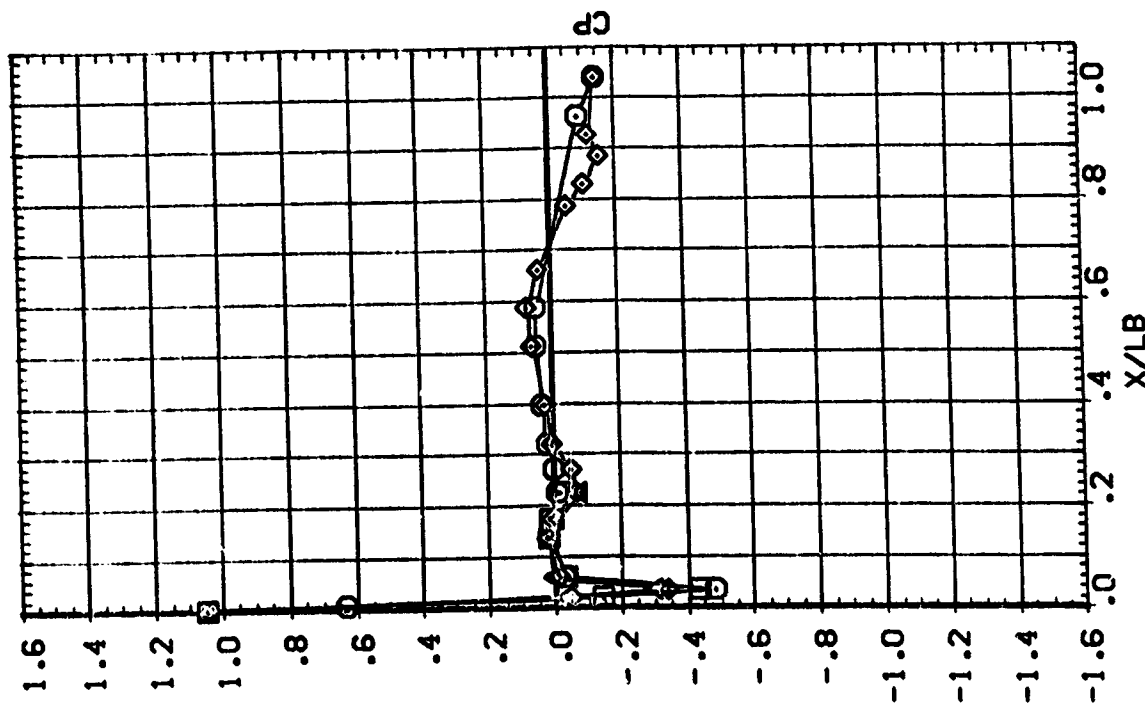
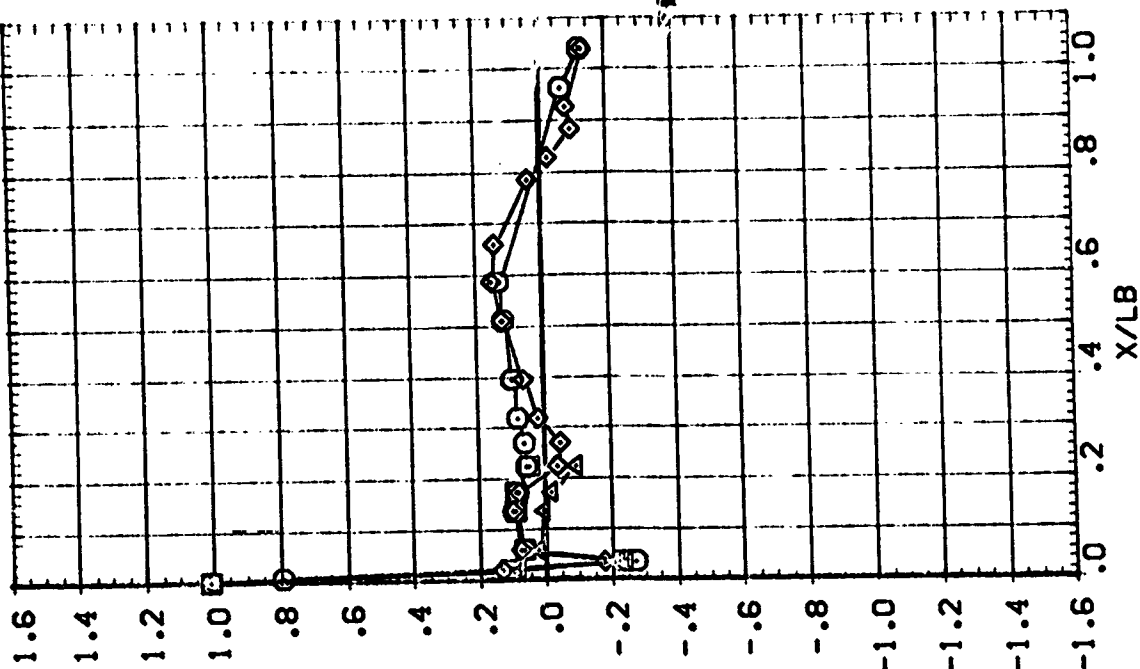
PHI
 .000
 20.000
 40.000
 55.000

ALPHA
 5.000
 10.040

MACH
 .600

BETA
 ELEVON

PARAMETRIC VALUES
 .000 .000 .000
 RUOER RUOFLR



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBPB01)

AVES 1:-707 0A12 02A

SYMBOL
○ □ ◇ △

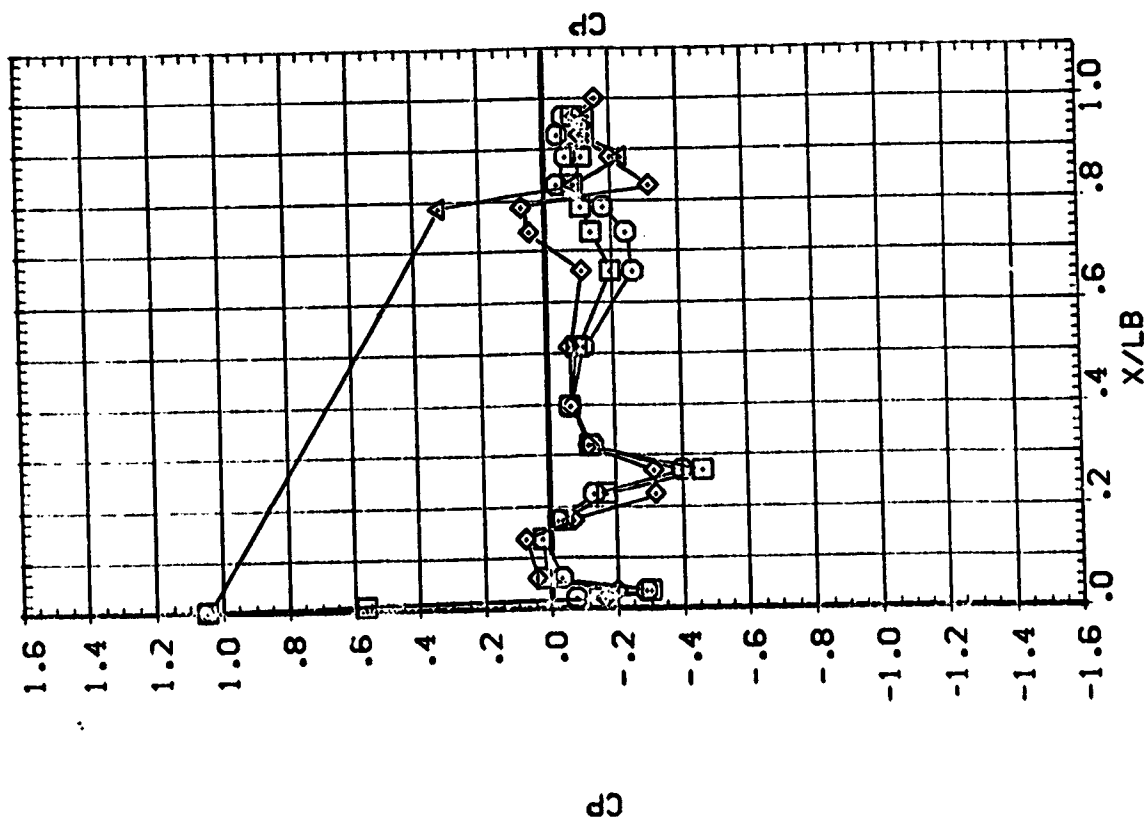
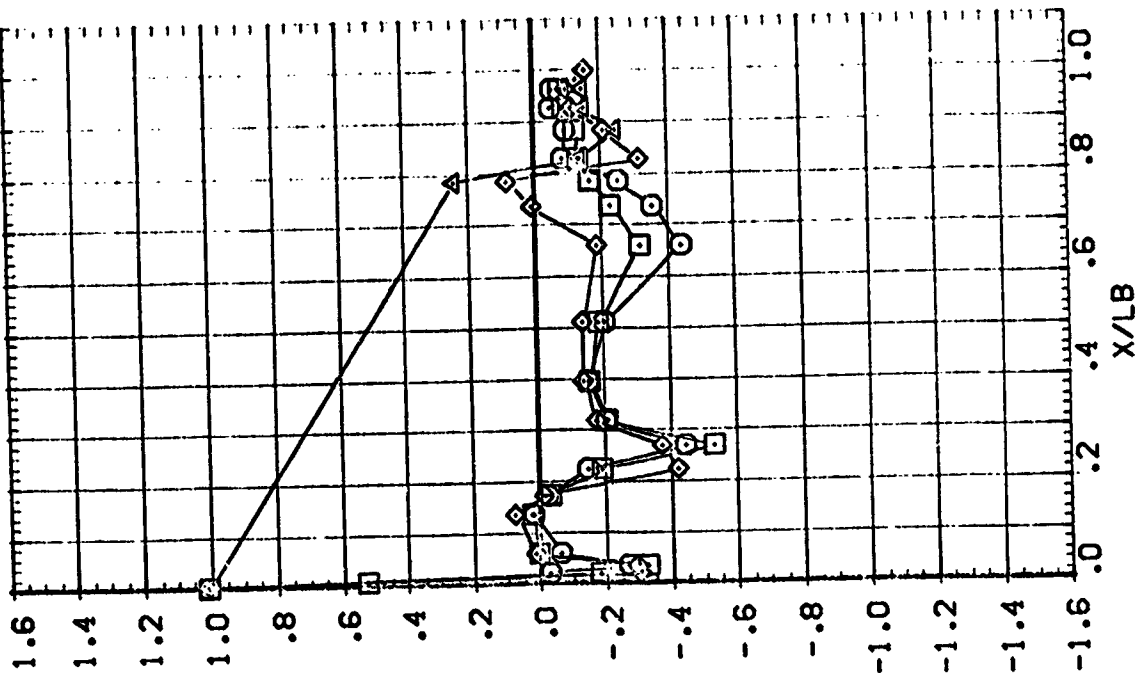
PHI
70.000
90.000
120.000
135.000

ALPHA
5.000
10.040

MACH
.600

BETA
ELEVON

PARAMETRIC VALUES
.000
RUDER
.000
RUDFLR



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

SYMBOL
O
□
◇

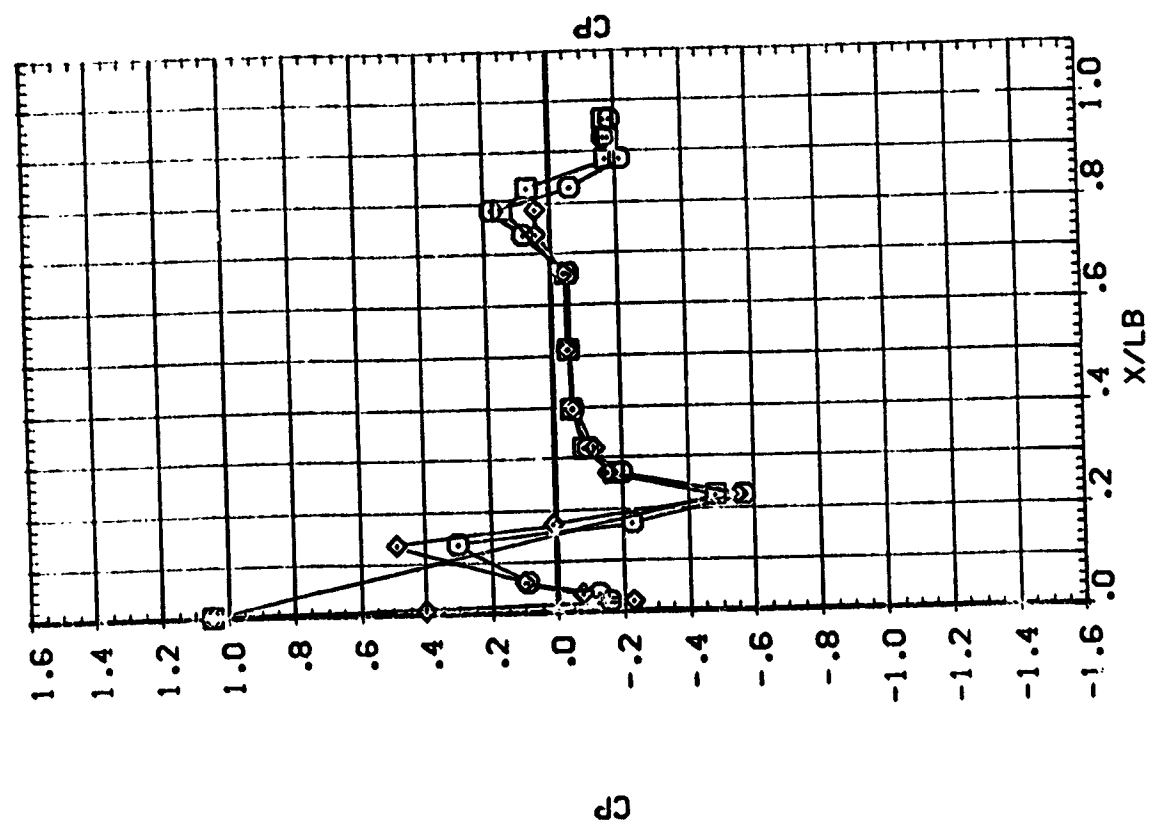
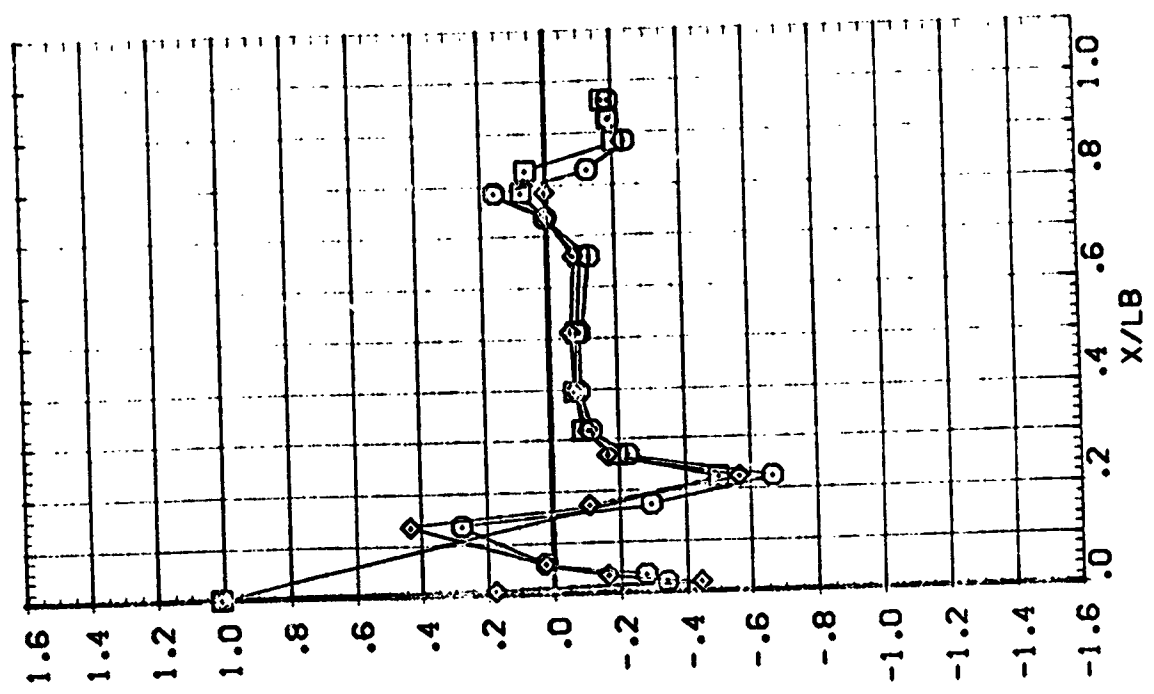
PM
150.000
165.000
180.000

ALPHA
5.030
10.040

MACH
.600

BETA
ELEVON

PARAMETRIC VALUES
.000
.000
.000
.000
.000
.000



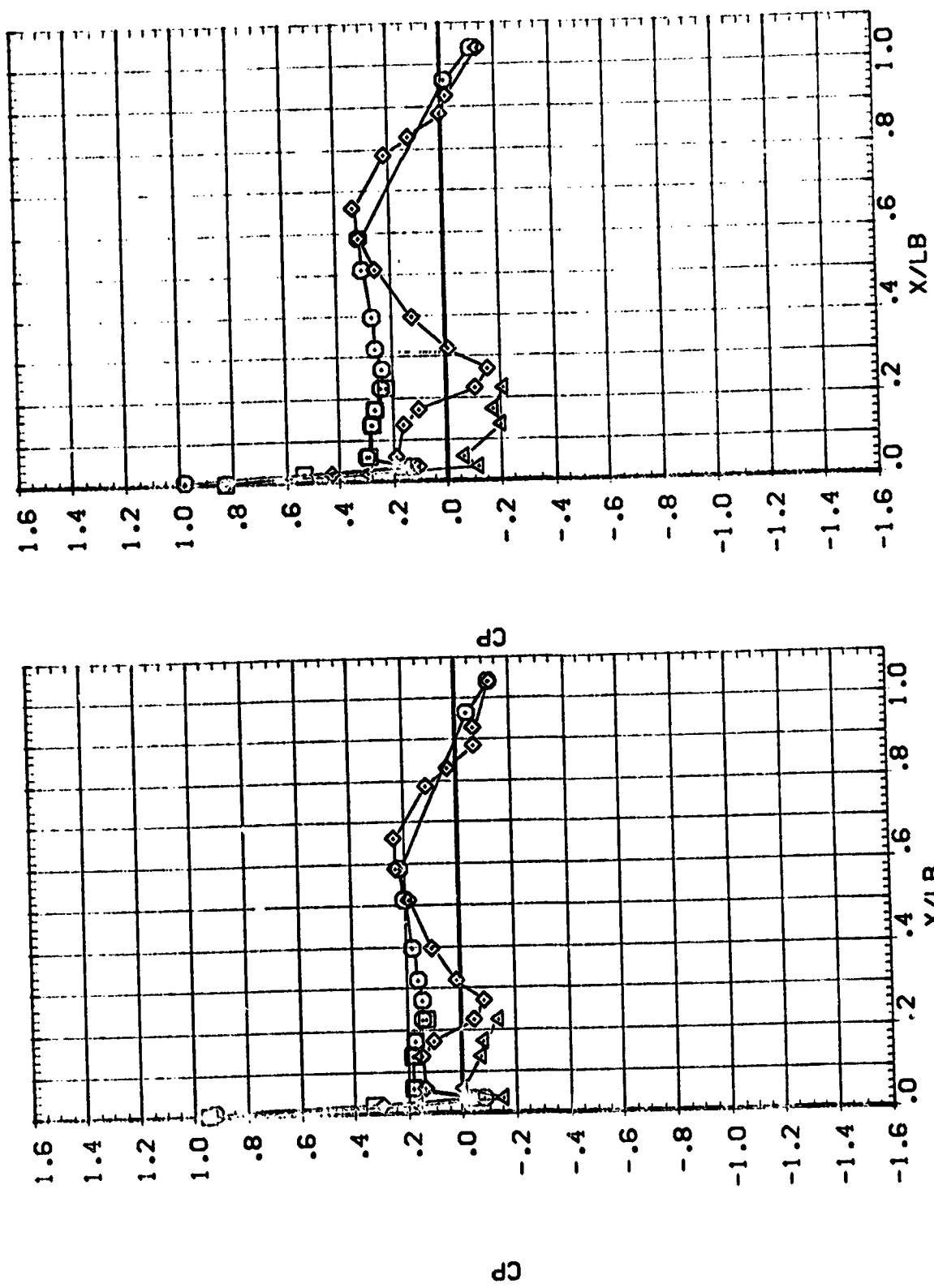
LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RB3BC1)

AVES 11-707 CA12 32A

PARAMETRIC VALUES
 BETA .000 RUDDER .000
 ELEVON .000 RUFLER .000

SVVC-
 .000 ALPHA 15.070 MACH .598
 20.000
 40.000
 55.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

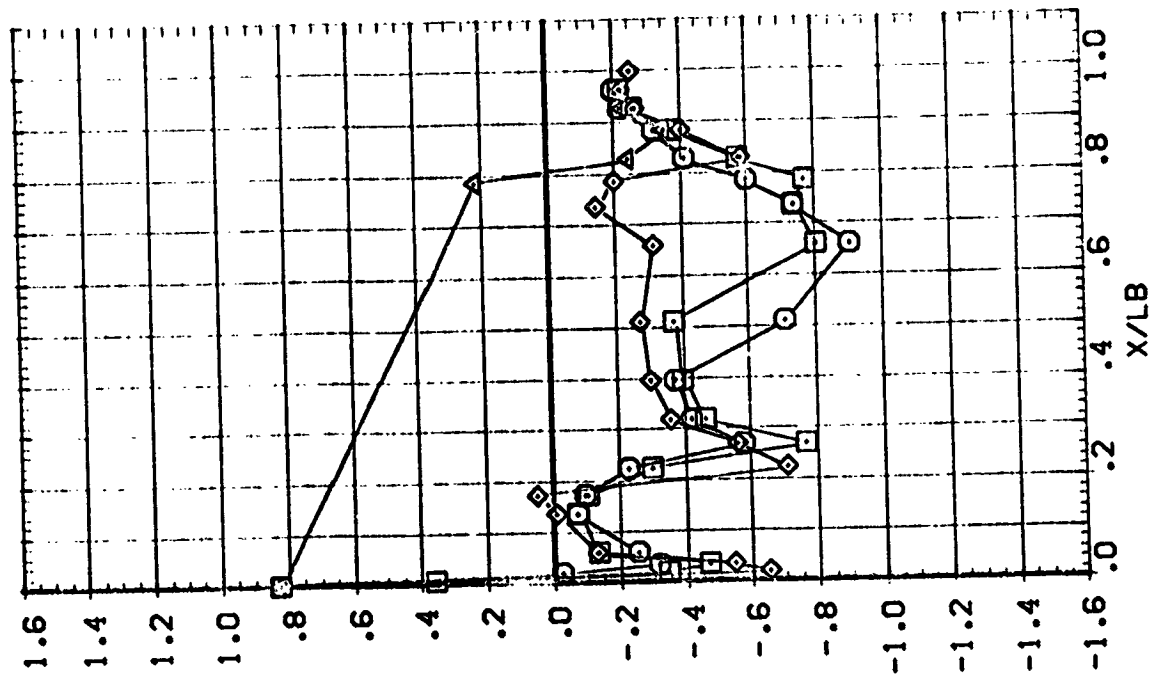
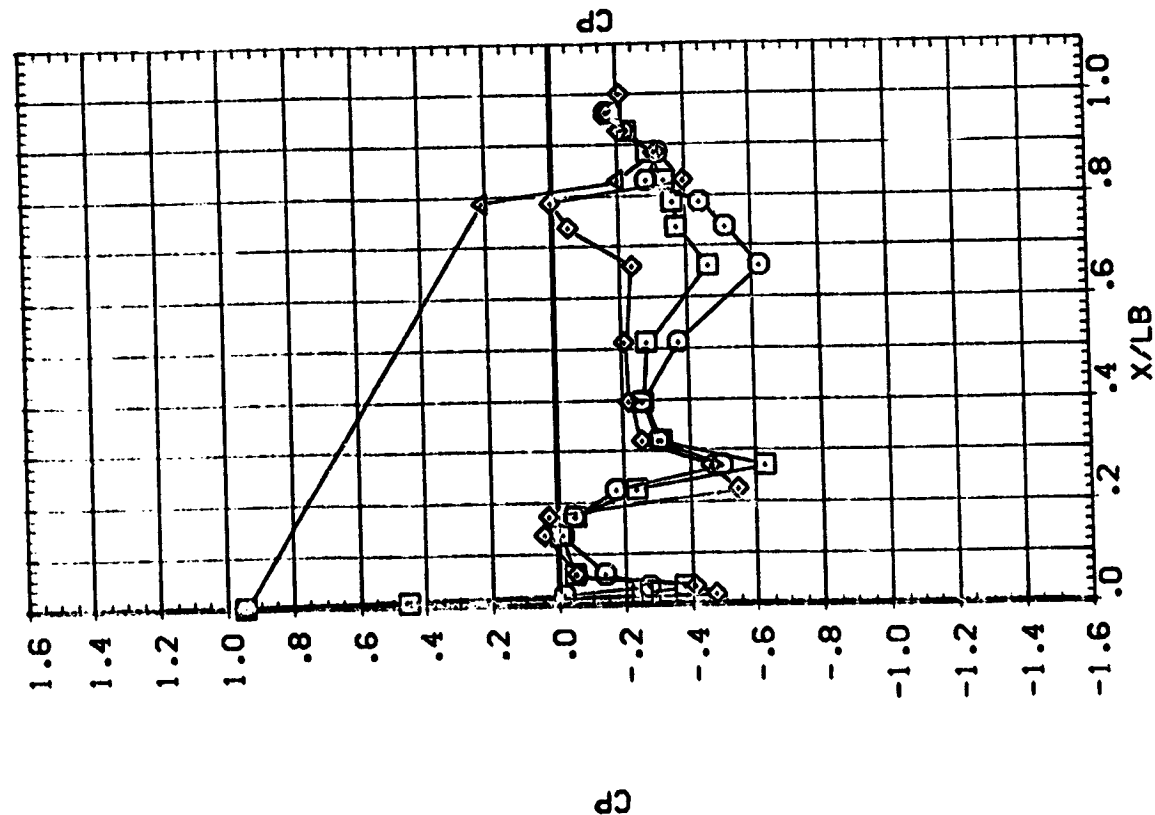
AVES 11-100 JA.2 ULR

SYMBOL
 ○ □ ◇ △

PHI 70.000
 90.000
 120.000
 135.000

ALPHA 15.020
 20.000

MACH .598



PARAMETRIC VALUES
 BETA .000
 ELEVON .000
 RUDDER .000
 RUFLR .000

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

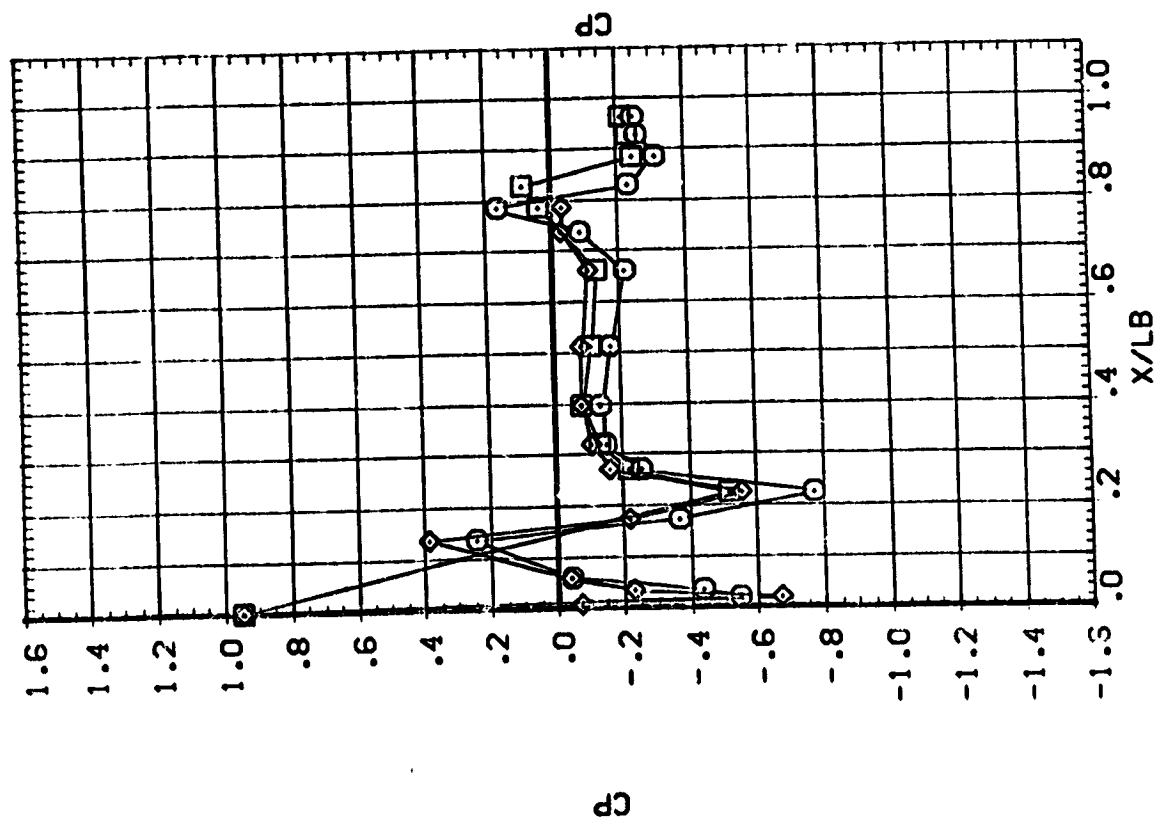
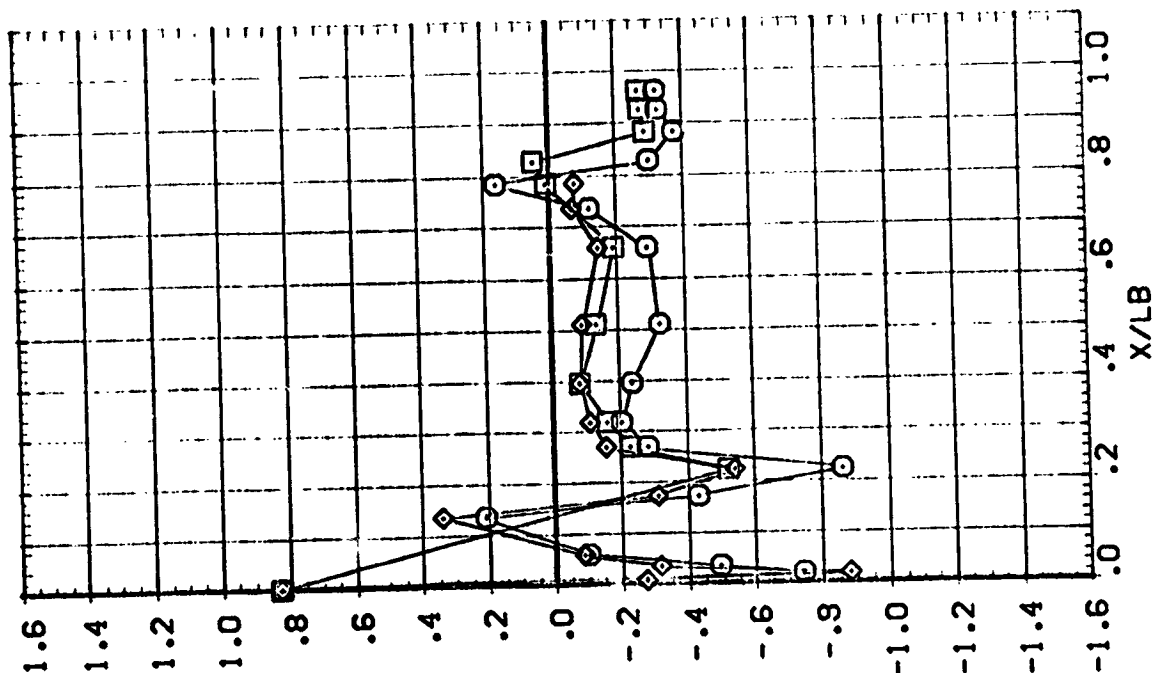
ORBITER FUSELAGE (RBP301)

AVES 11-707 CA12 32A

SV301
O
U
◇

ALPHA 15.020
MACH .598
20.000
180.000

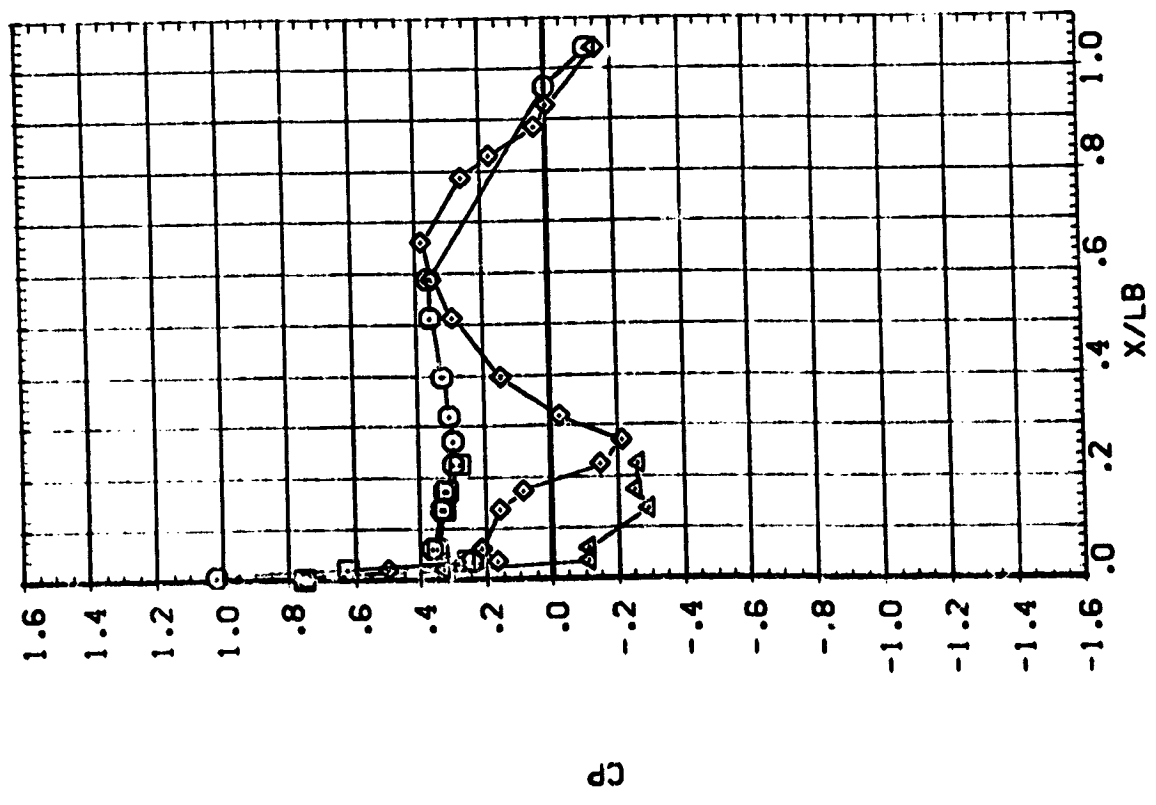
PARAMETRIC VALUES
BETA .000
ELEVON .000
RUDDER .000
RUDDER .000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

PARAMETRIC VALUES
BETA .000
ELEVON .000
RUDDER .000
RUDDLR .000

SYSC-
PH: .000
20.000
40.000
55.000
ALPHA 22.580
WACH .597

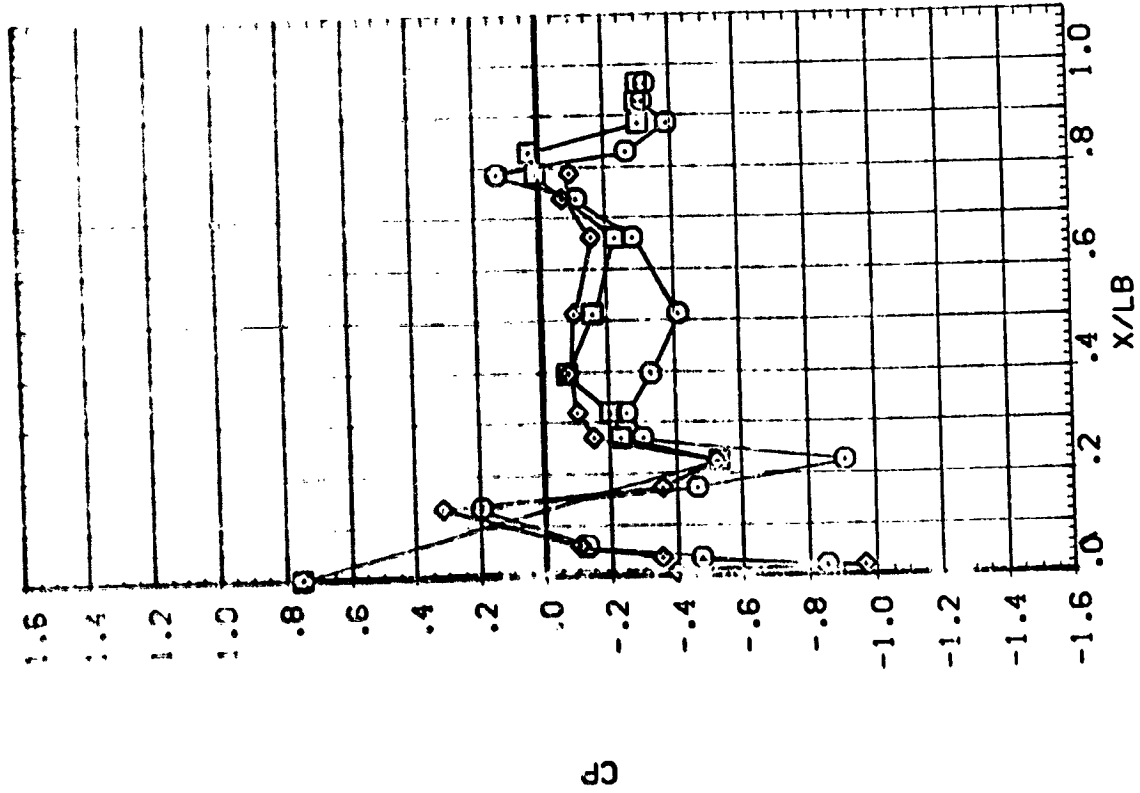


LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

THE



44
(1)
5
6



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

SYNCH
0
1
2
3
4
5

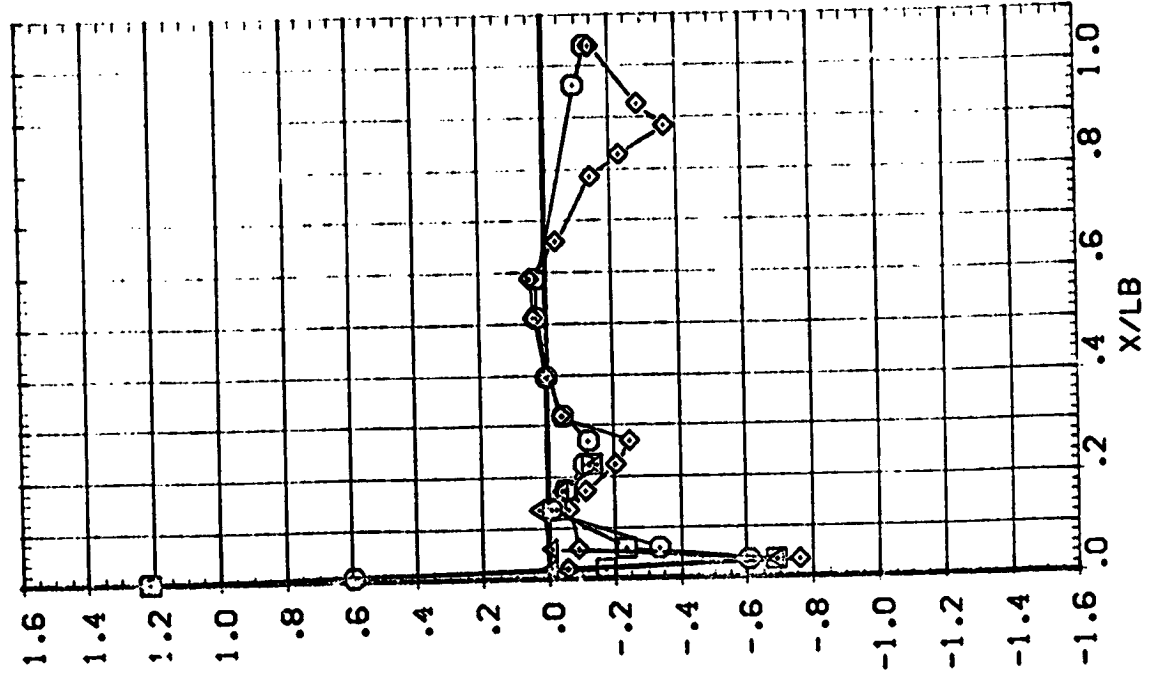
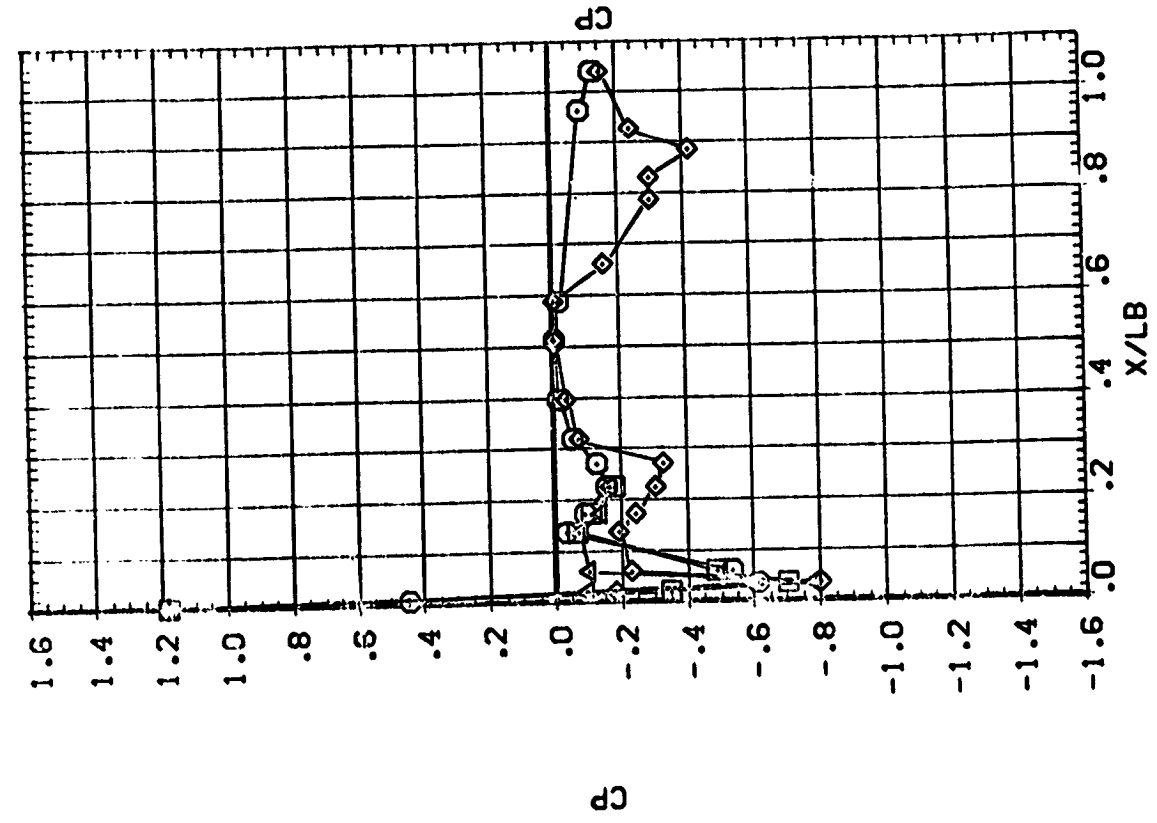
PHI .000
20.000
40.000
55.000

ALPHA -4.560
-0.010

MACH .905

BETA
ELEVON

PARAMETRIC VALUES
.000 .000 .000
RUDER RUFFLE



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

PARAMETER VALUES

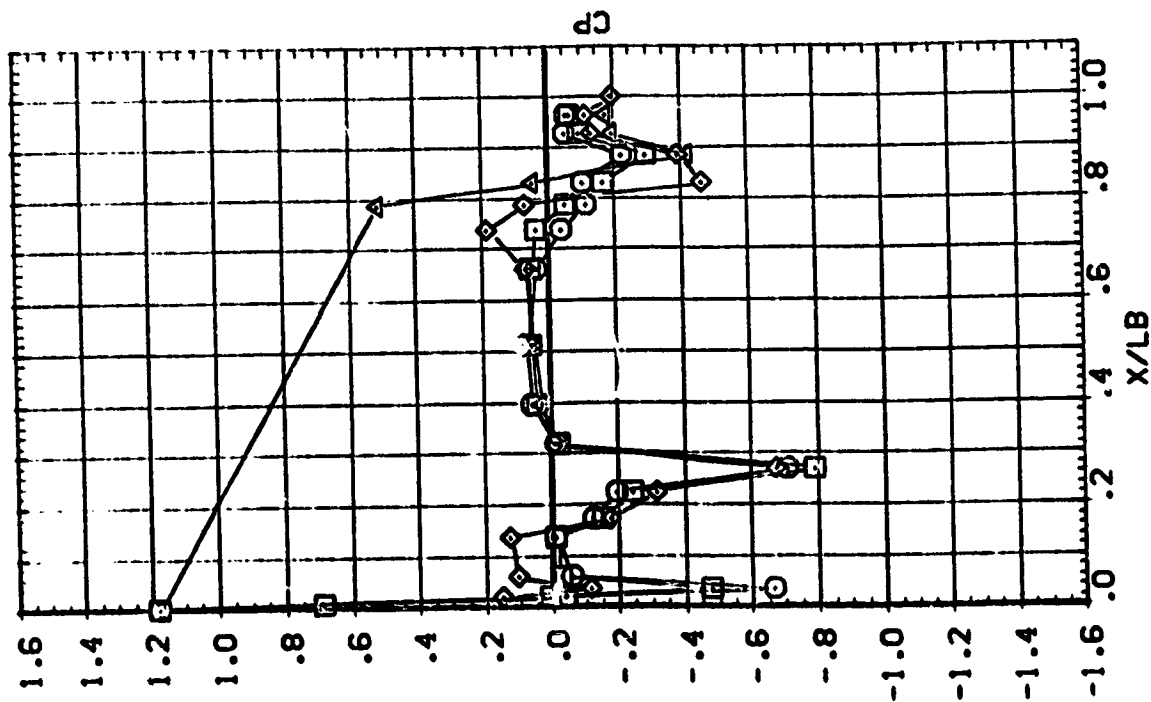
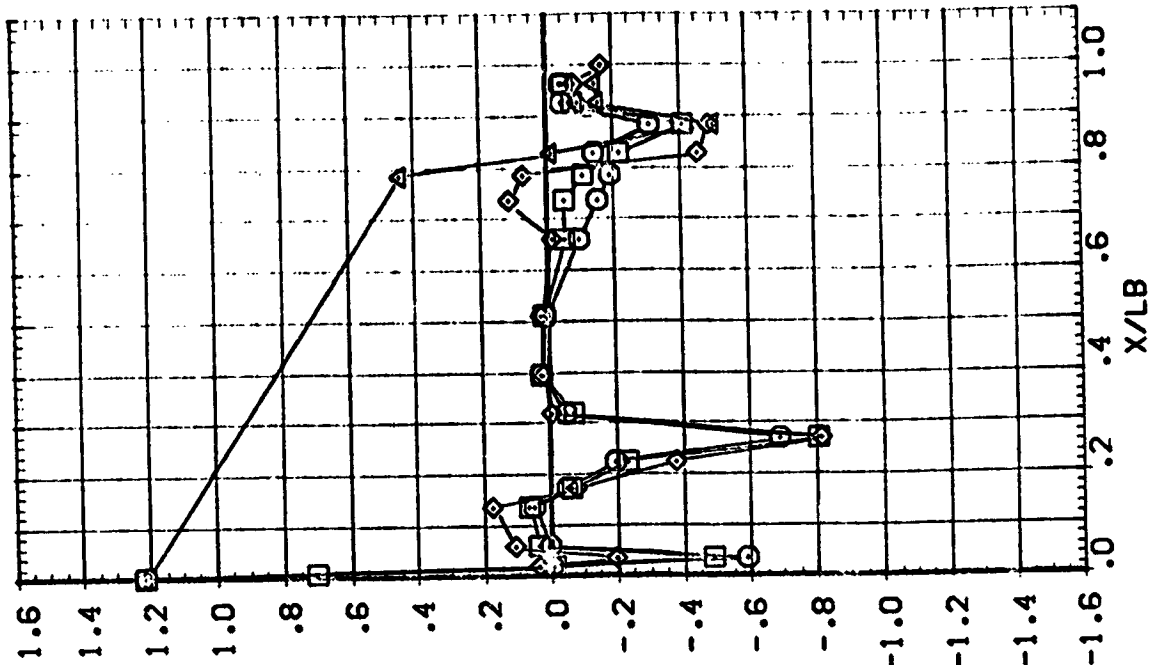
BETA
ELEVON

MACH
.905

ALPHA
-4.560
-0.10

Re: 70,000
90,000
120,000
150,000

SYMBOL
O I D Δ



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBP30::)

AMES 11-707 0A12 C2A

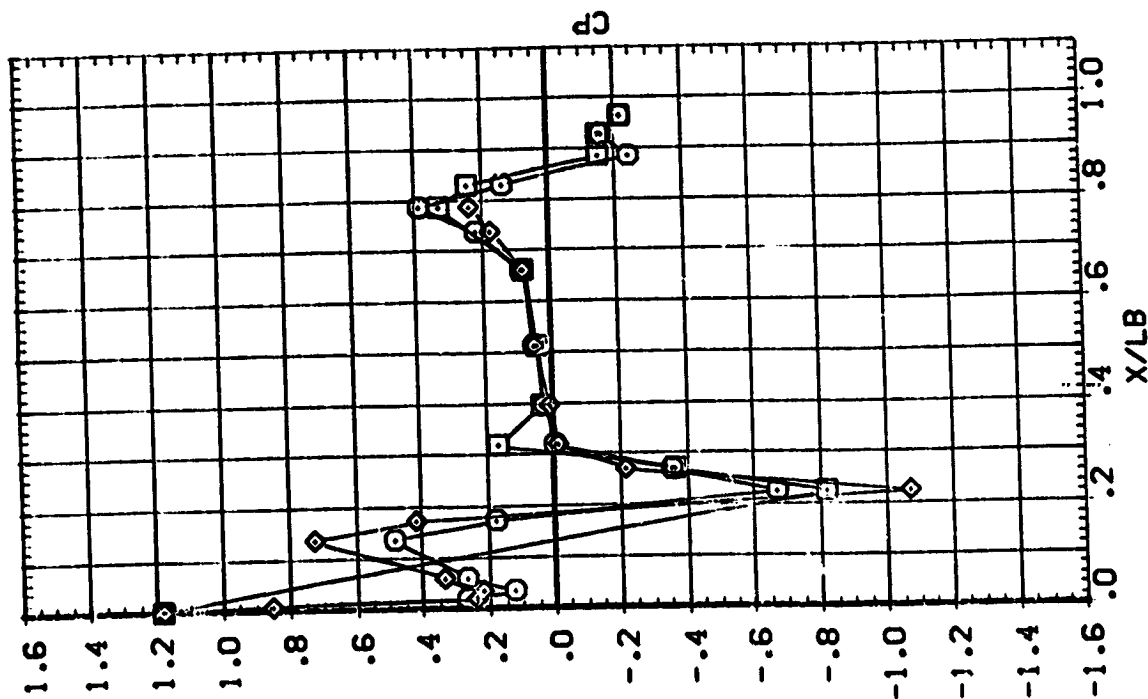
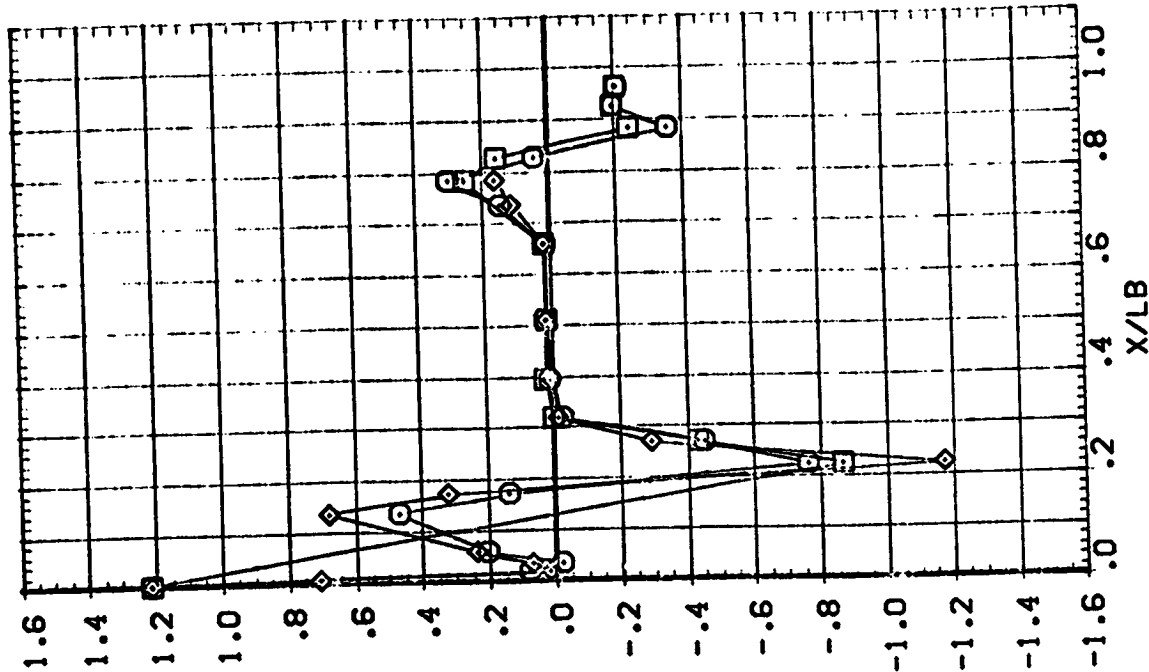
SYNCH
PHI
150.000
165.000
180.000

ALPHA
-4.560
-0.010

MACH
.905

BETA
ELEVEN

PARAMETRIC VALUES
.000 R-DOER
.000 R-DOFLR
.000

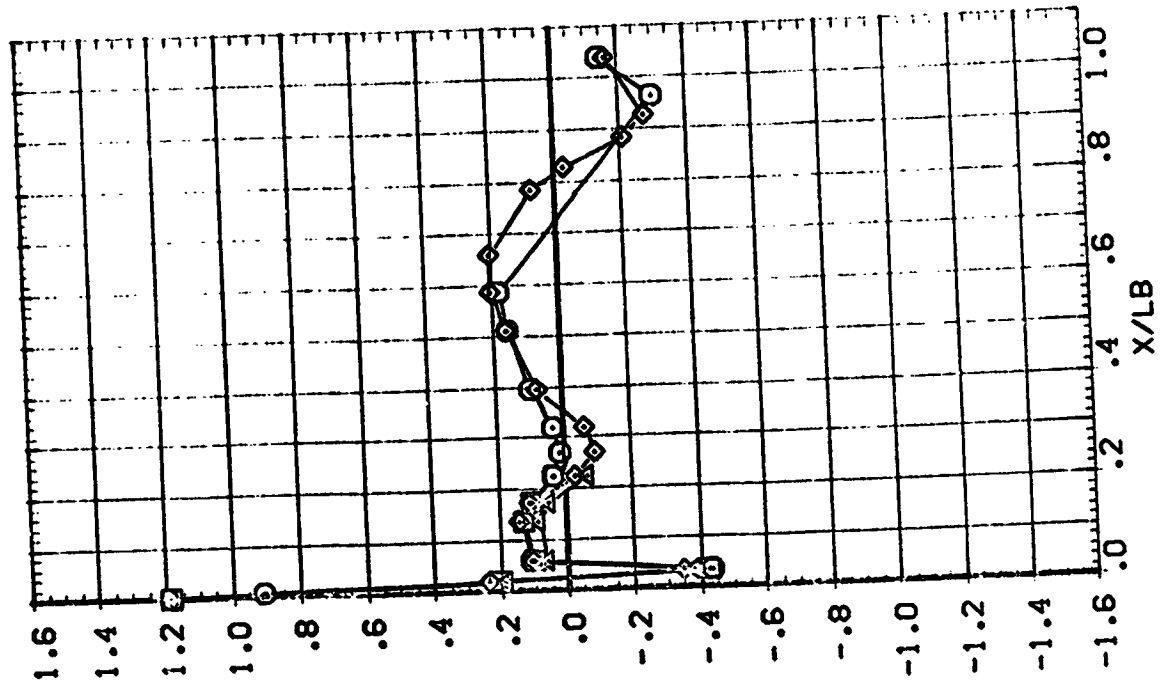


LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

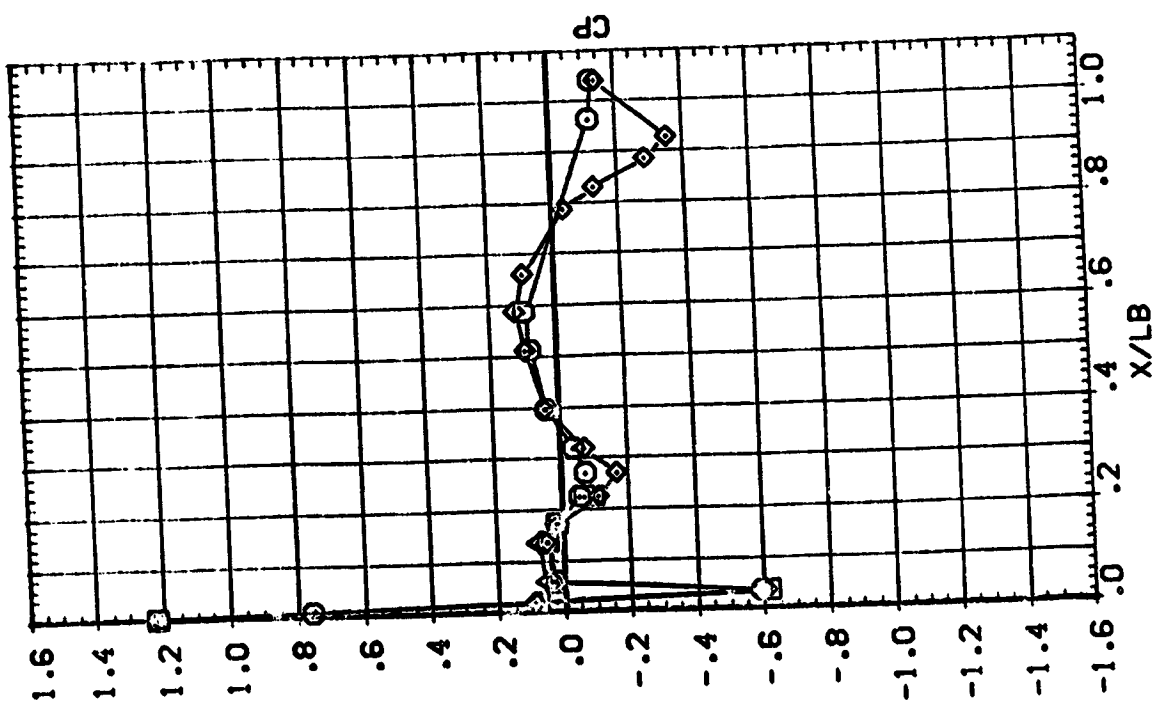
ELEVATION

TIME

4.980
9.990
20.000
40.000
55.000



PAGE 16



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES



ORBITER FUSELAGE (RBPB01)

AMES 11-707 0A12 02A

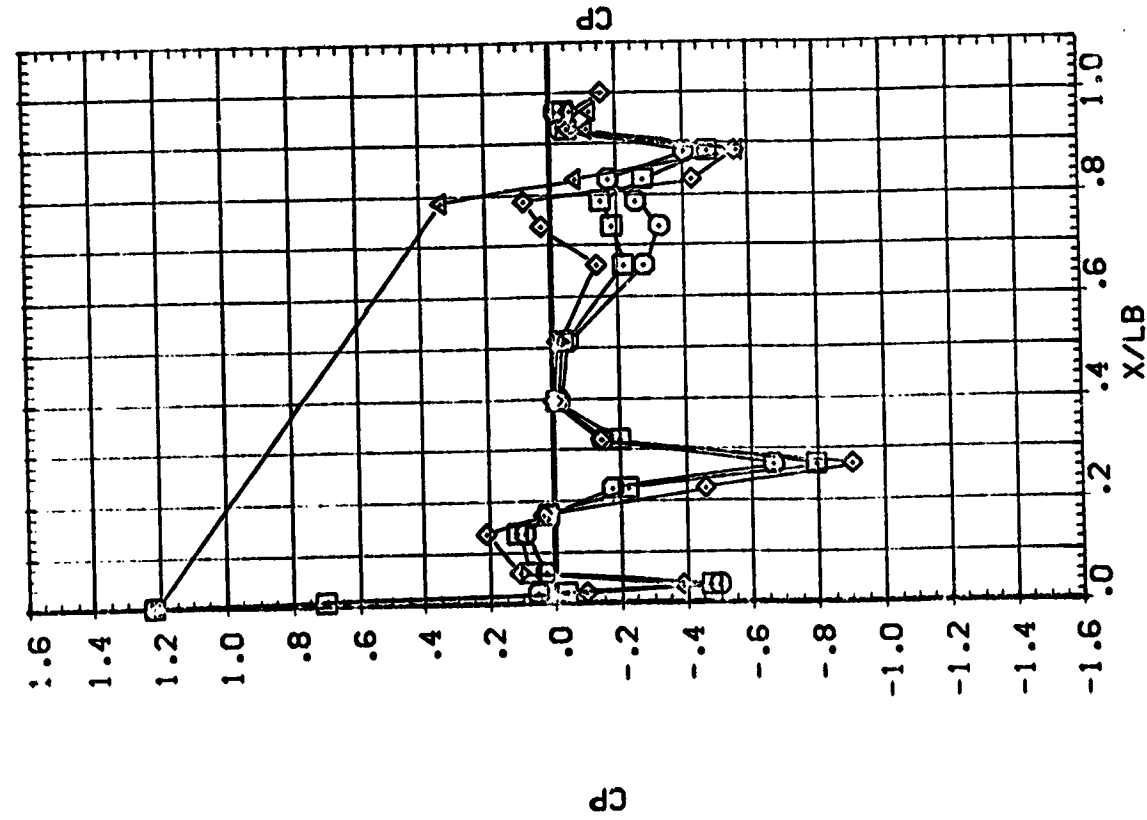
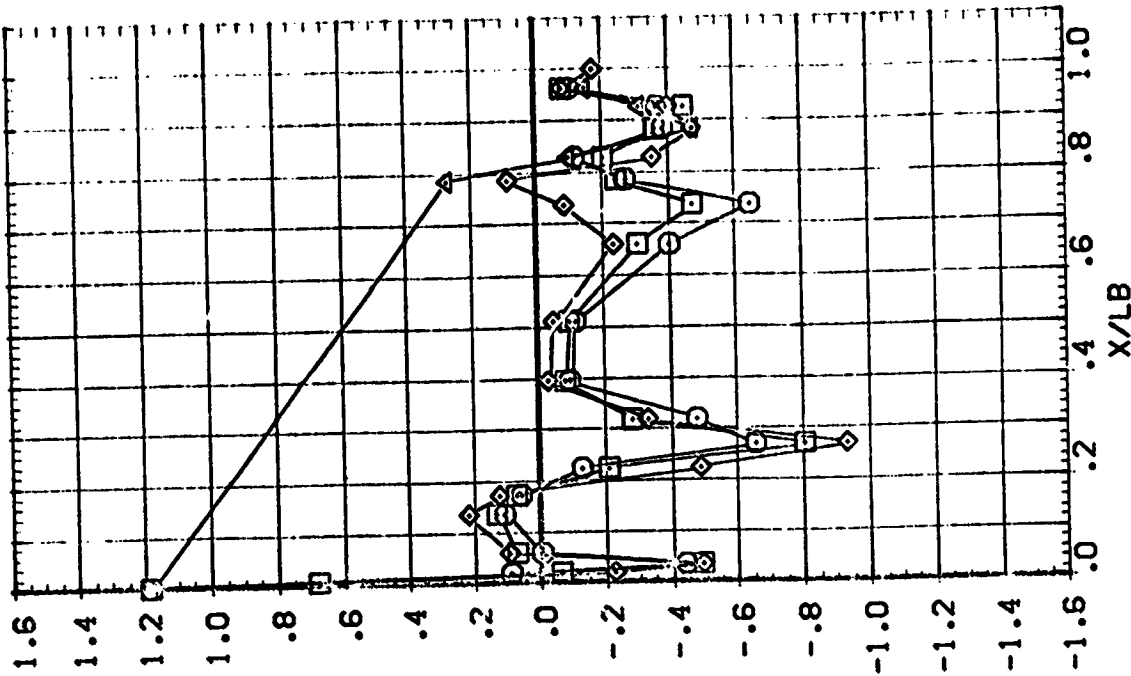
PARAMETRIC VALUES
 .000 RUDDER
 .000 RUDFLR

BETA
 ELEVON

ALPHA MACH
 4.980 .904
 9.99C

PHI
 70.000
 90.000
 120.000
 135.000

SYNCS
 O
 X
 A

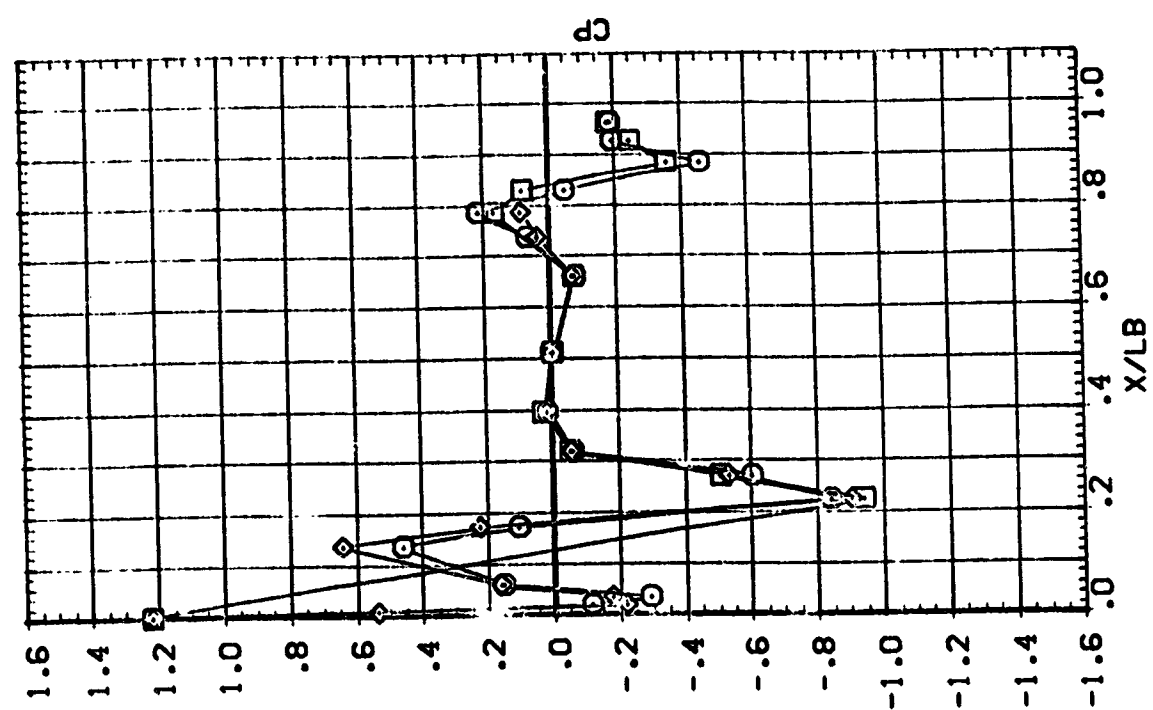
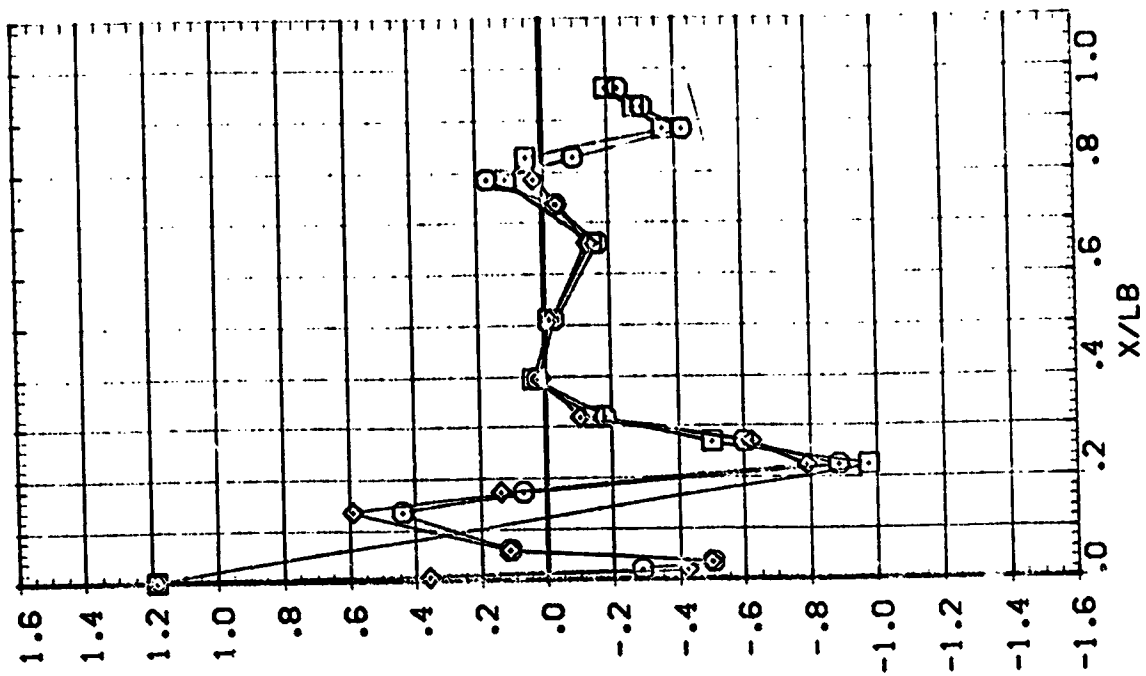


--LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

SYNTH
()
()

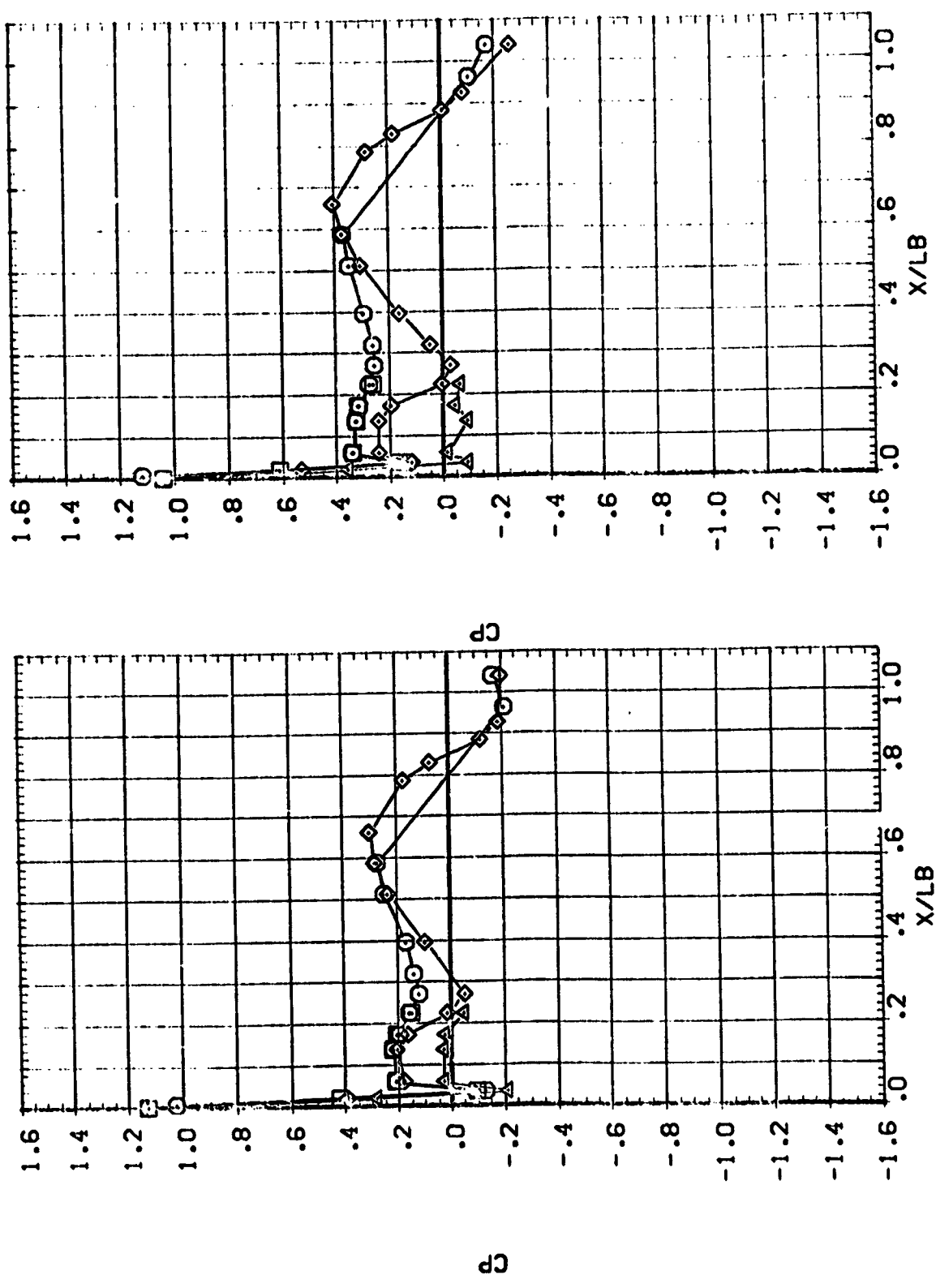
PH: ALPHA MACH
150.000 4.980 .904
165.000 9.990
180.000

PARAMETRIC VALUES
BETA ELEVON .000 RUDER .000
ELEVON .000 RUDER .000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

SYNOPSIS
PHI: .000
20.000
40.000
55.000
ALPHA 14.990
20.020
MACH .901
PARAMETRIC VALUES
BETA .000
ELEVON .000
RUDDER .000
RUDELR .000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

SYMBOL
○ □ ◇ △

PHI
70.000
90.000
120.000
135.000

ALPHA
14.990
20.020

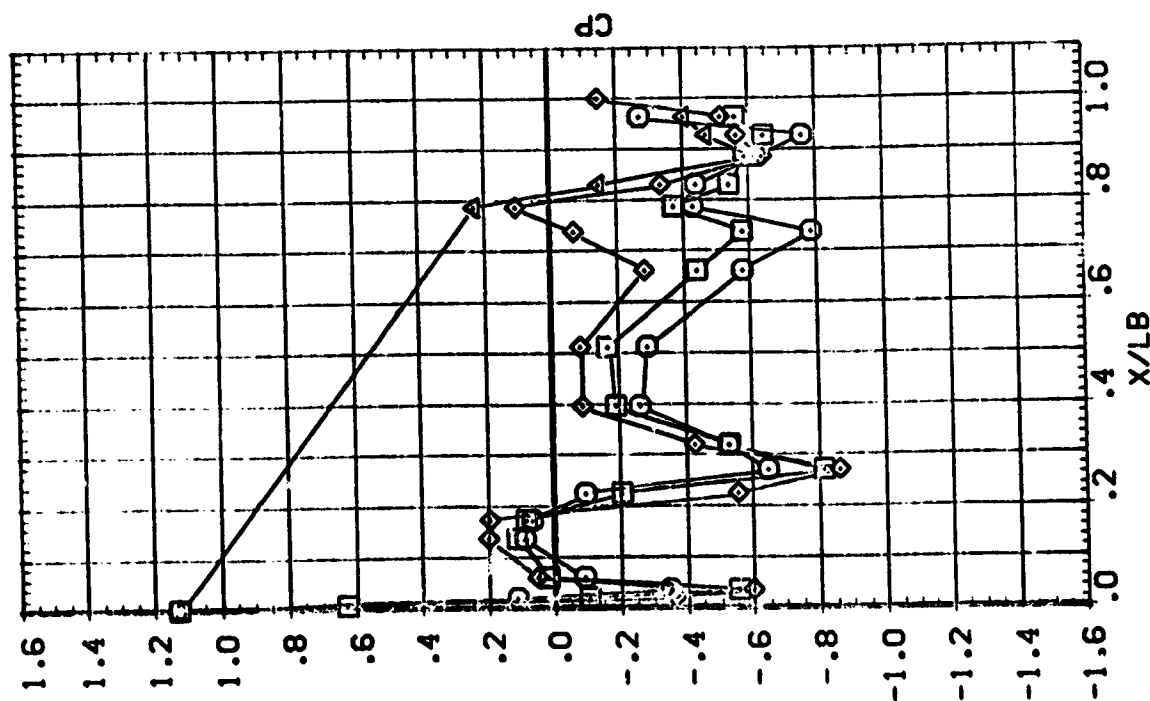
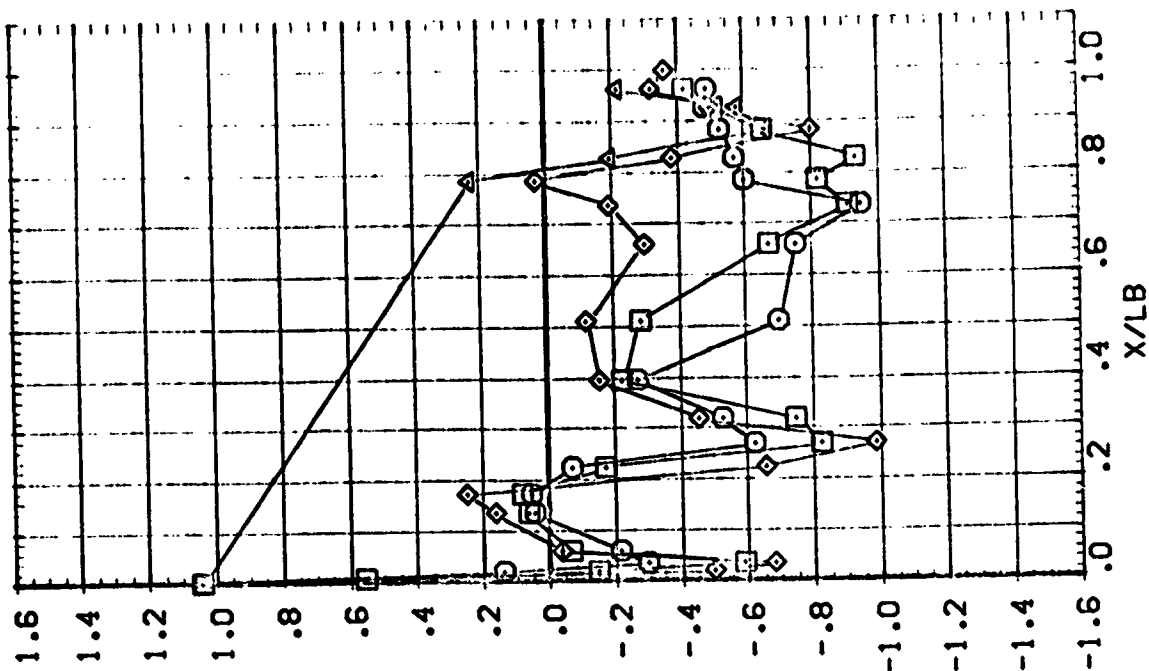
MACH
.901

PARAMETRIC VALUES

BETA
ELEVON

.000
.000
.000

RUDER
RUDFLP



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBP801)

AVES : 1-707 CA12 02A

PARAMETRIC VALUES

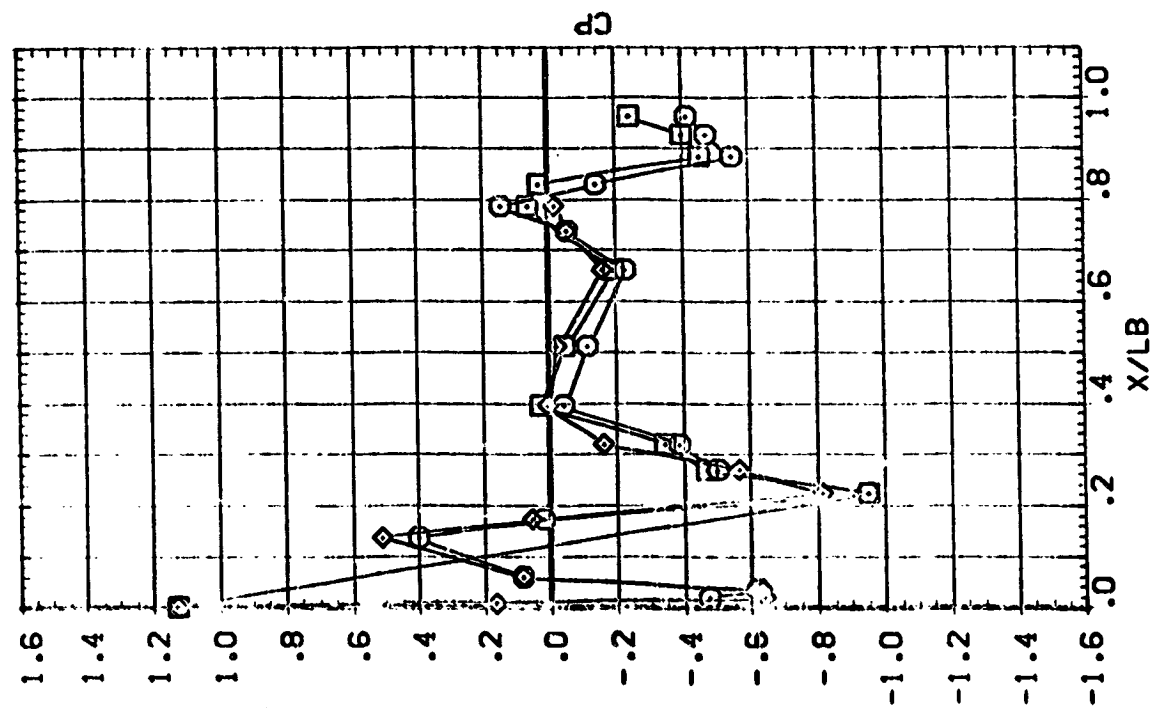
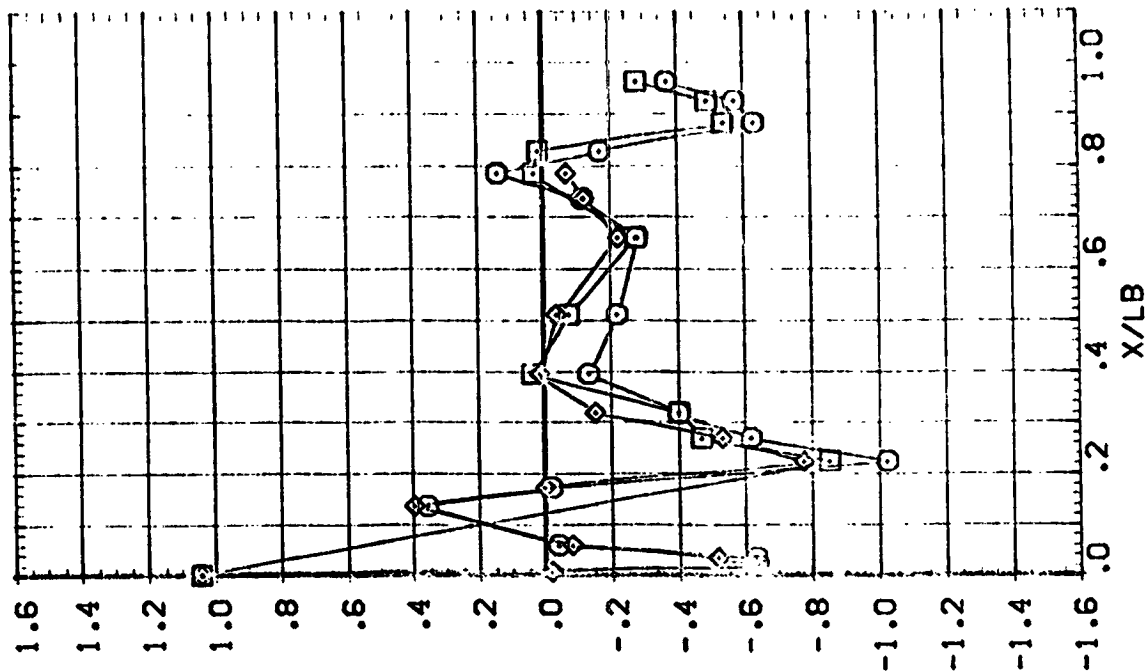
BETA
ELEVON

.000
.000
.000
.000

PHI: A-P-A MACH

.901
14.990
20.020

SVVC-
150.000
185.000
180.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ALPHAS 11 JUL 67 ULH

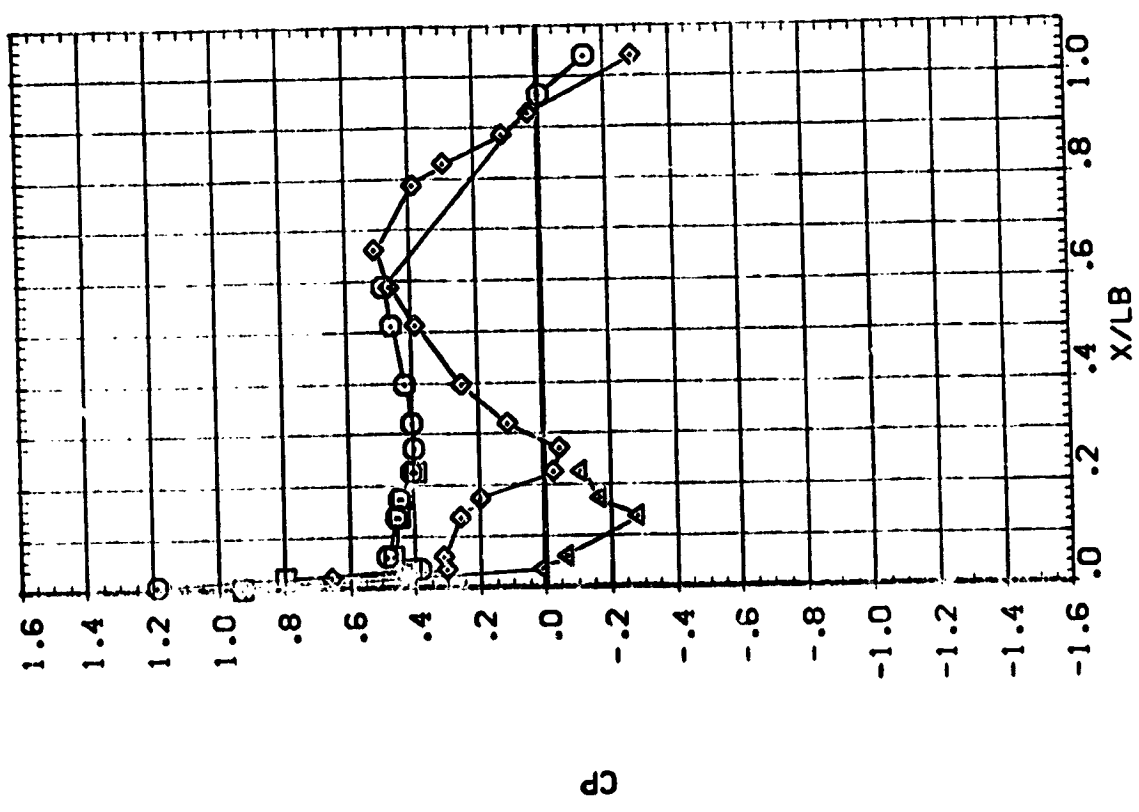
SYMBOL
 PH1
 .000
 20.000
 40.000
 55.000

ALPHA 25.040

MACH .902

PARAMETRIC VALUES
 .000
 .000
 .000
 .000
 .000
 .000

BETA
 ELEVON



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

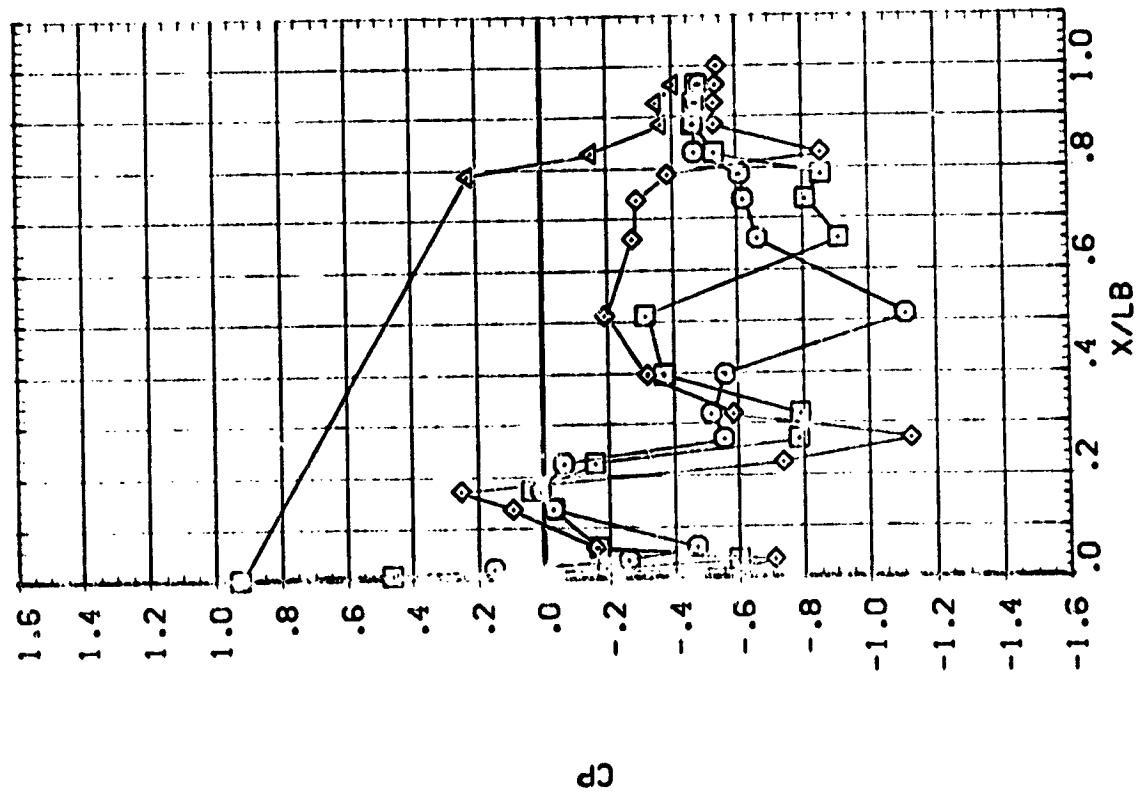
AVES ::-707 CA:2 02A ORBITER FUSELAGE (R3PB01)

PARAMETRIC VALUES
 BETA .000
 ELEVON .000
 .000
 .000
 .000

SYNCH-
 ()
 ()
 ()
 ()

AVES
 70.000
 80.000
 90.000
 100.000
 110.000
 120.000
 130.000

AVES
 70.000
 80.000
 90.000
 100.000
 110.000
 120.000
 130.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (933000)

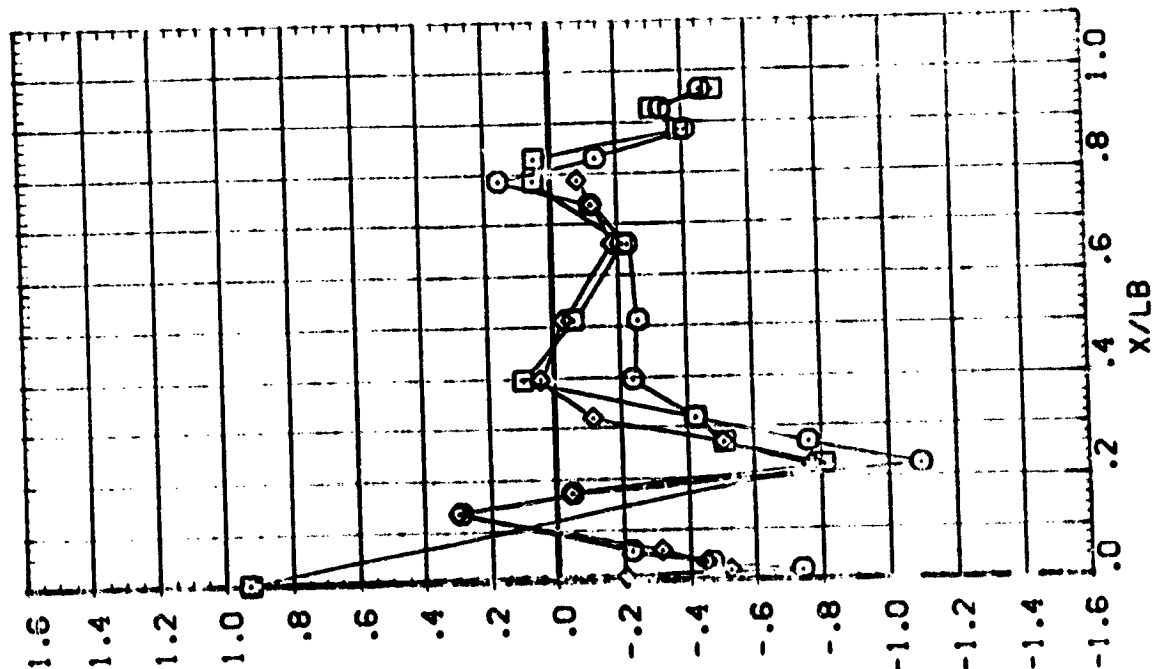
AVES 11-707 CA:2 C2A

SV930
01 10

ALPHA 75.040
MACH .902

PARAMETRIC VALUES
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
P31
P32
P33
P34
P35
P36
P37
P38
P39
P40
P41
P42
P43
P44
P45
P46
P47
P48
P49
P50
P51
P52
P53
P54
P55
P56
P57
P58
P59
P60
P61
P62
P63
P64
P65
P66
P67
P68
P69
P70
P71
P72
P73
P74
P75
P76
P77
P78
P79
P80
P81
P82
P83
P84
P85
P86
P87
P88
P89
P90
P91
P92
P93
P94
P95
P96
P97
P98
P99
P100

SE-A
E-100



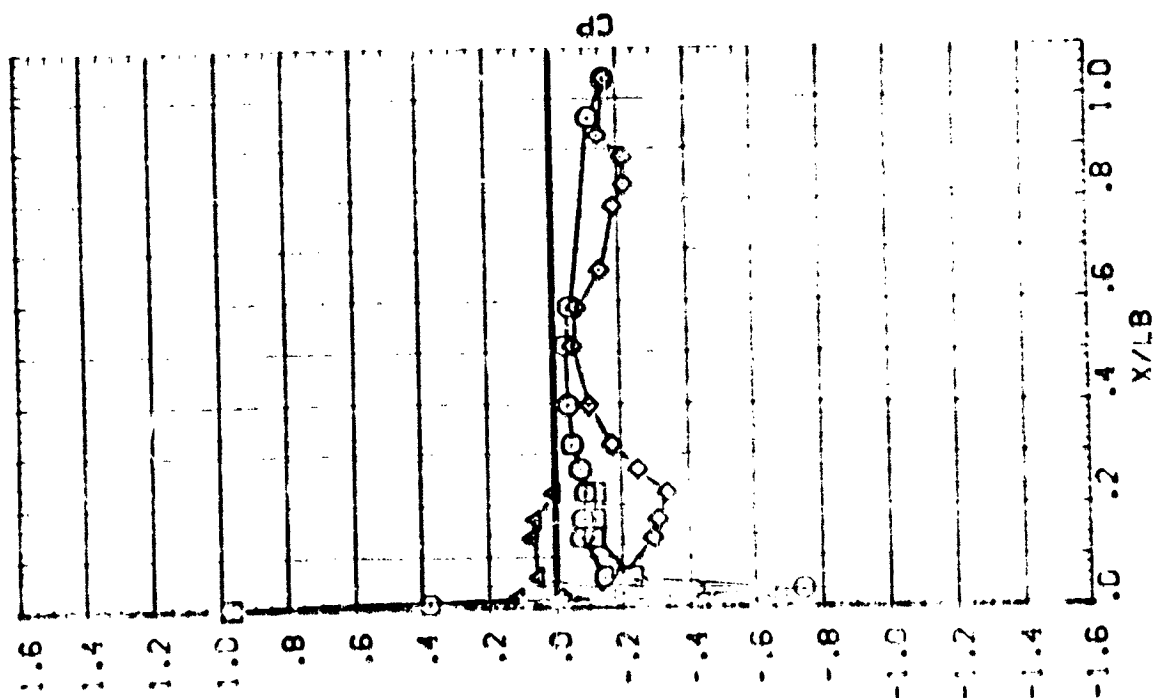
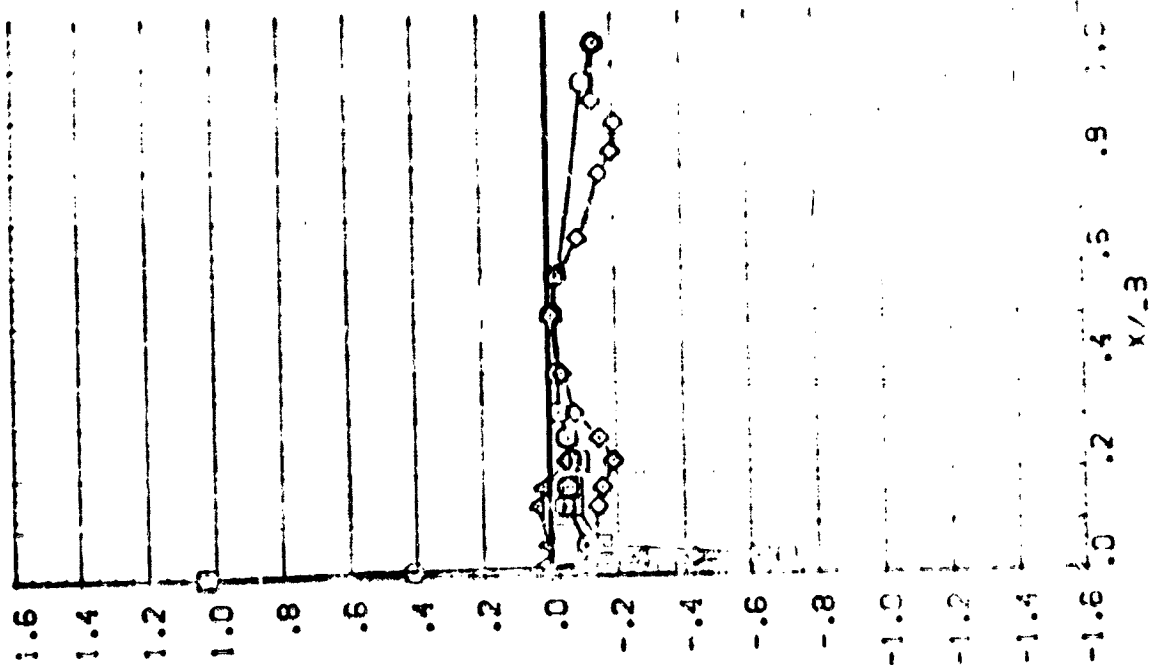
LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

111
112
113
114
115

[illegible]

005
31

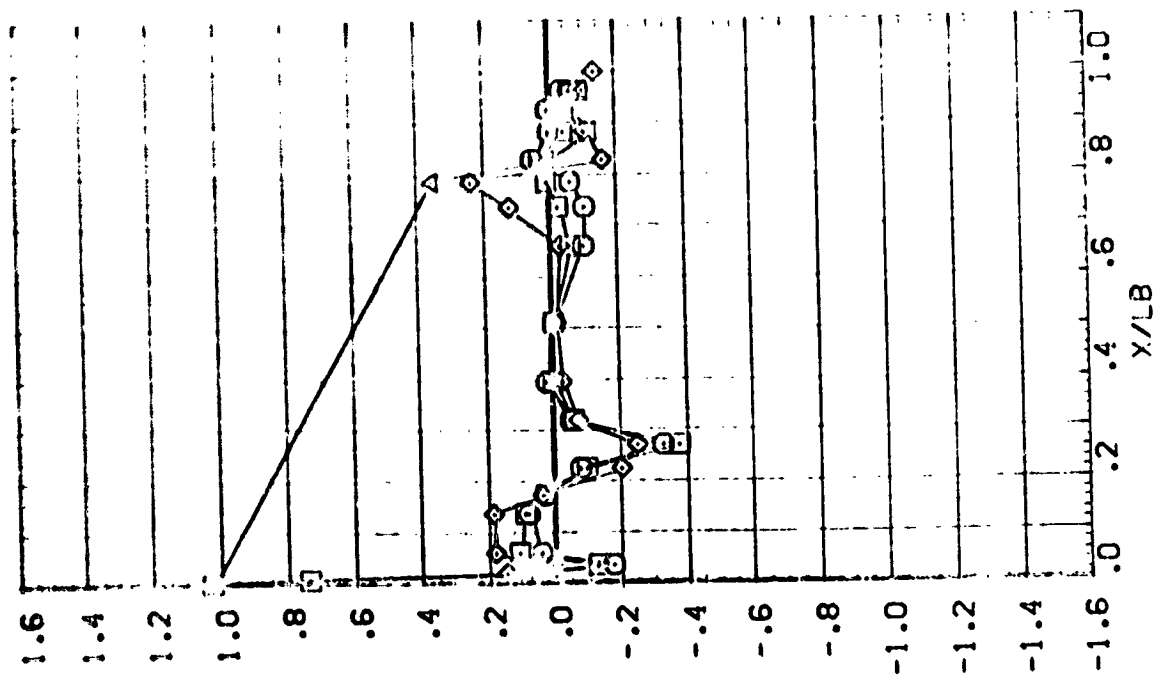
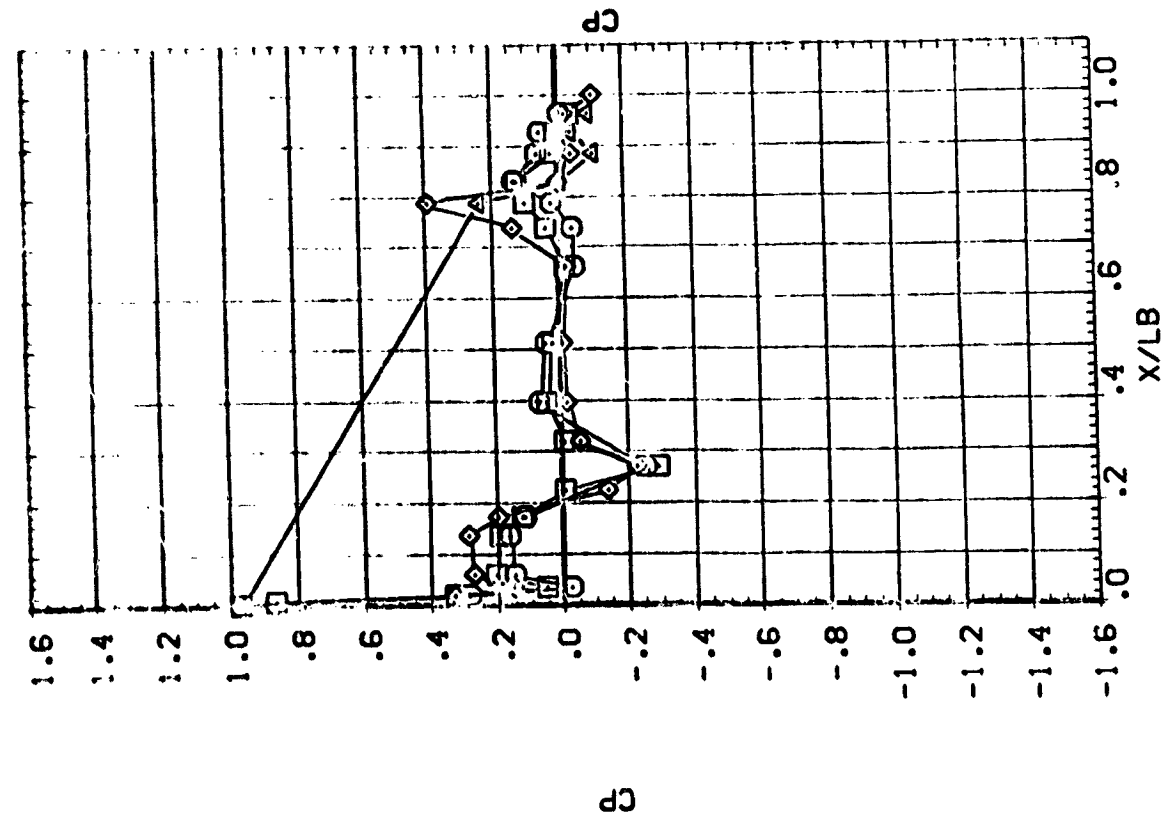
6-9



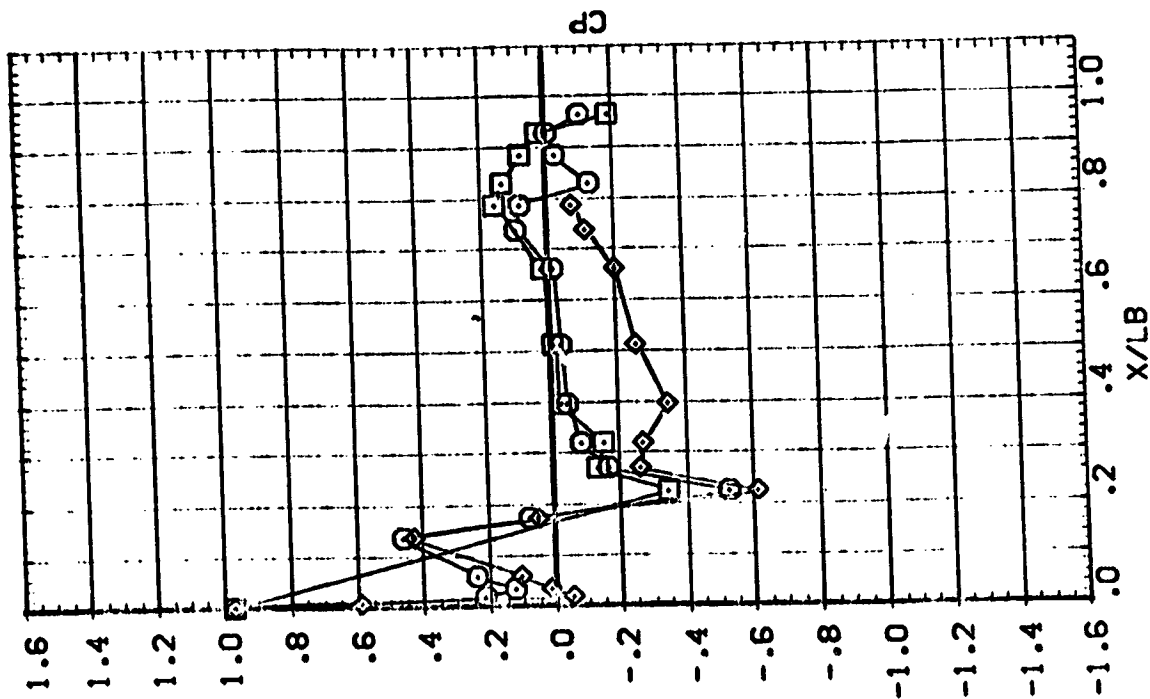
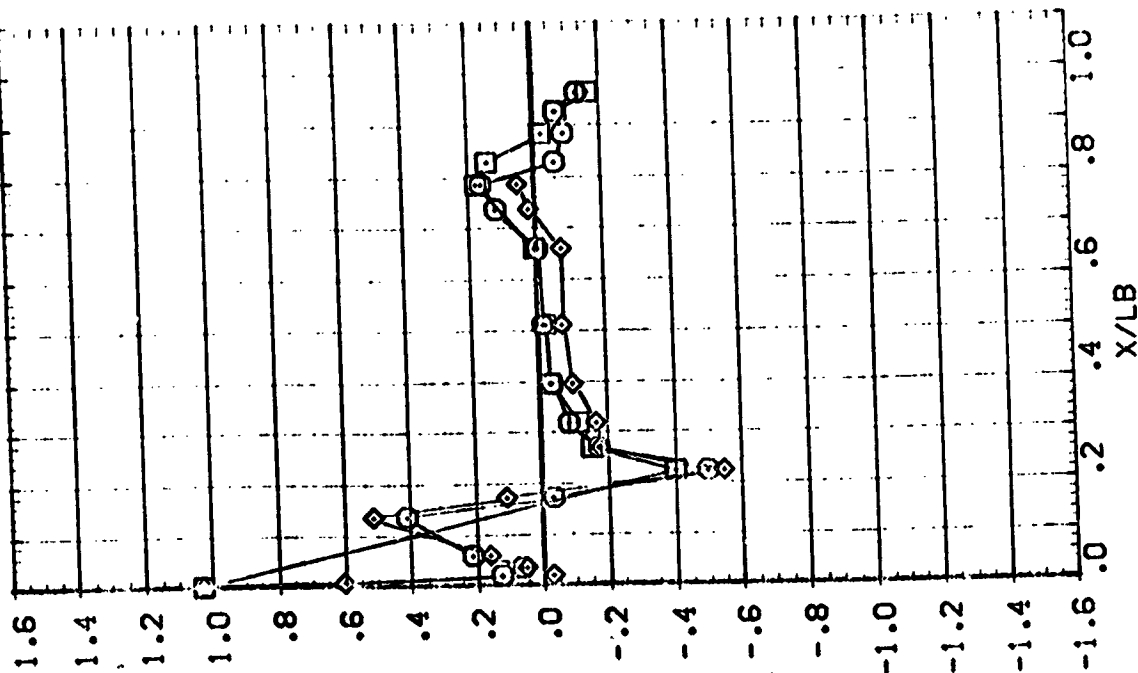
LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

SWR: 70.000
 80.000
 90.000
 100.000
 110.000
 120.000
 130.000

ORBITER FUSELAGE PRESS. 100 1000000

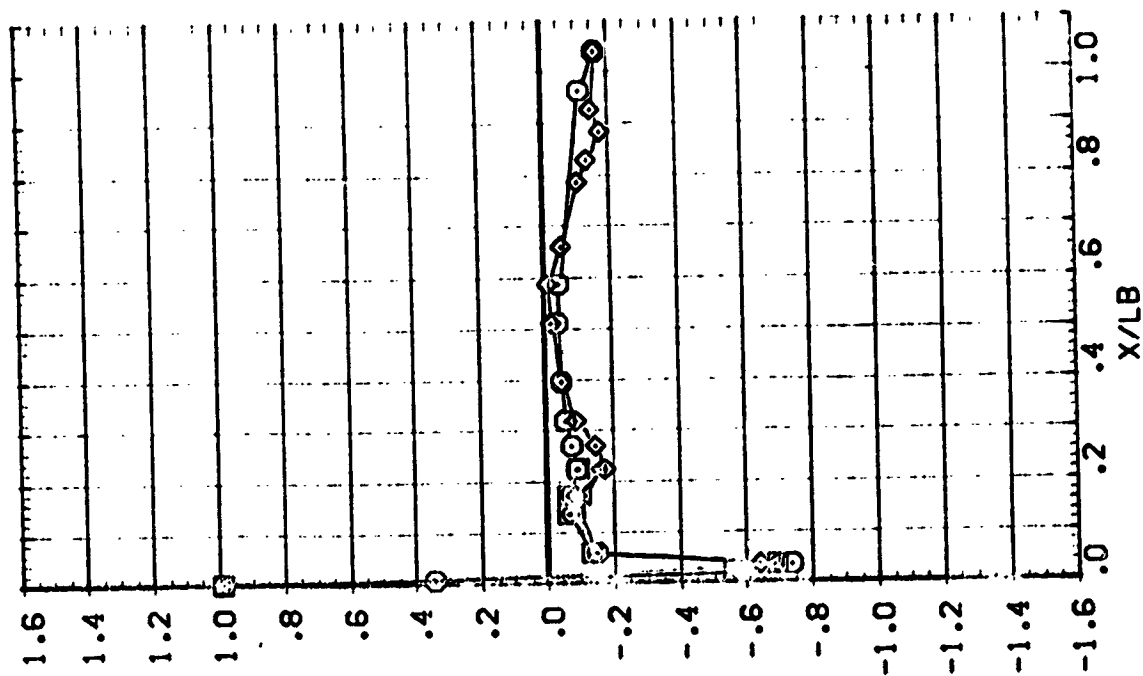
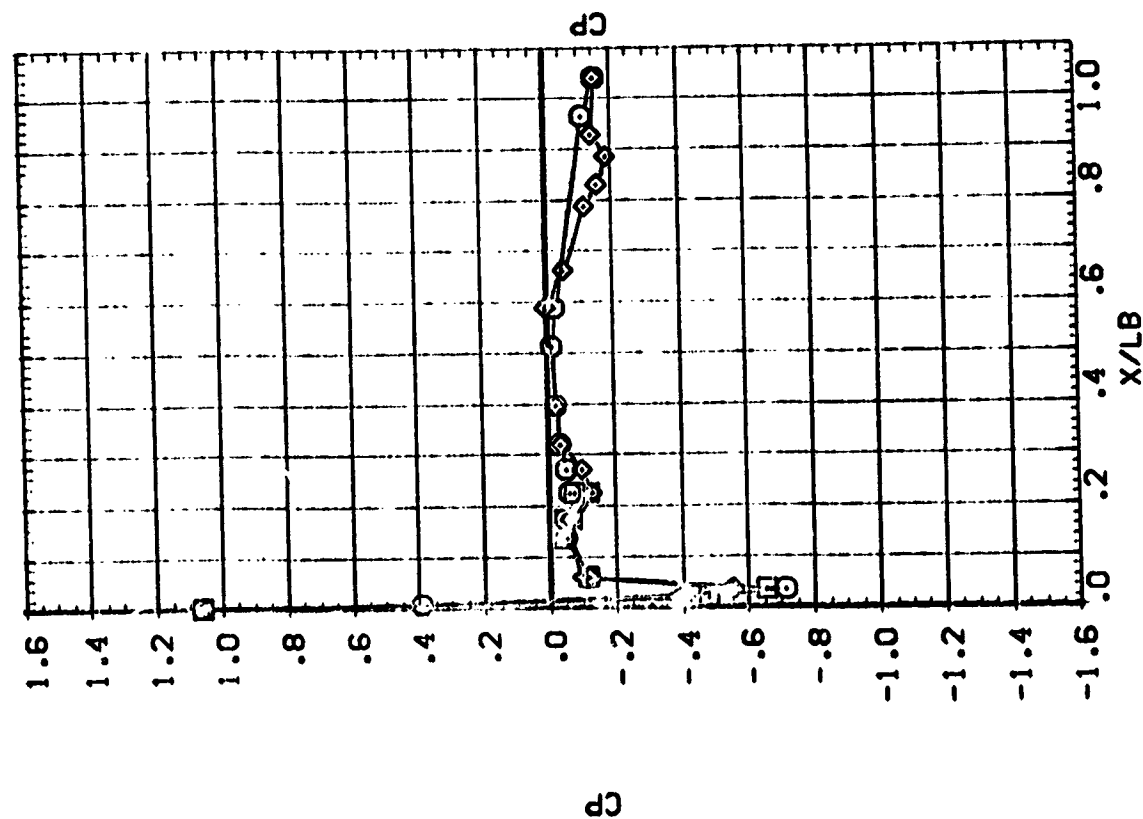


LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES



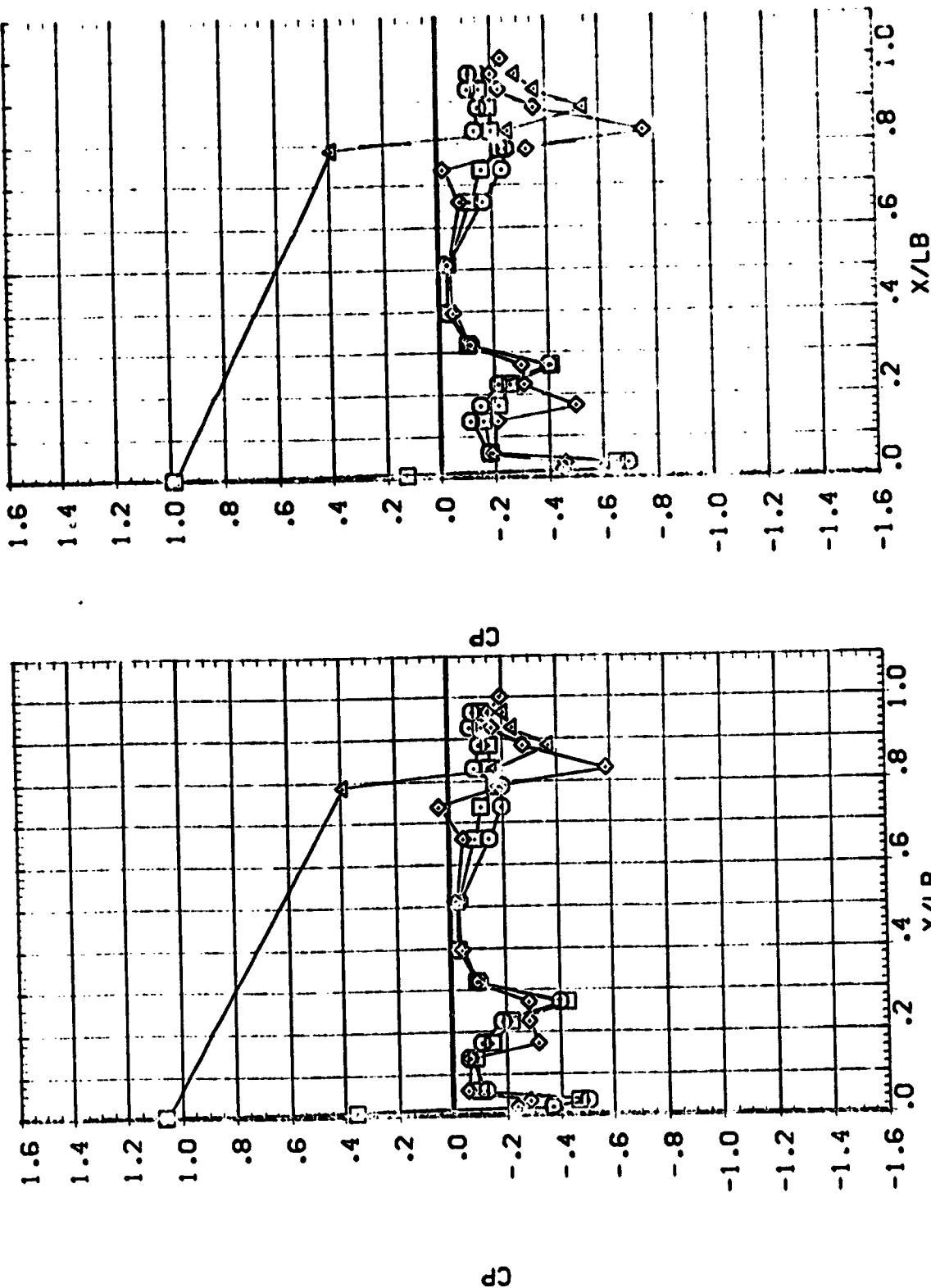
LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

U Δ
J1000
55.000

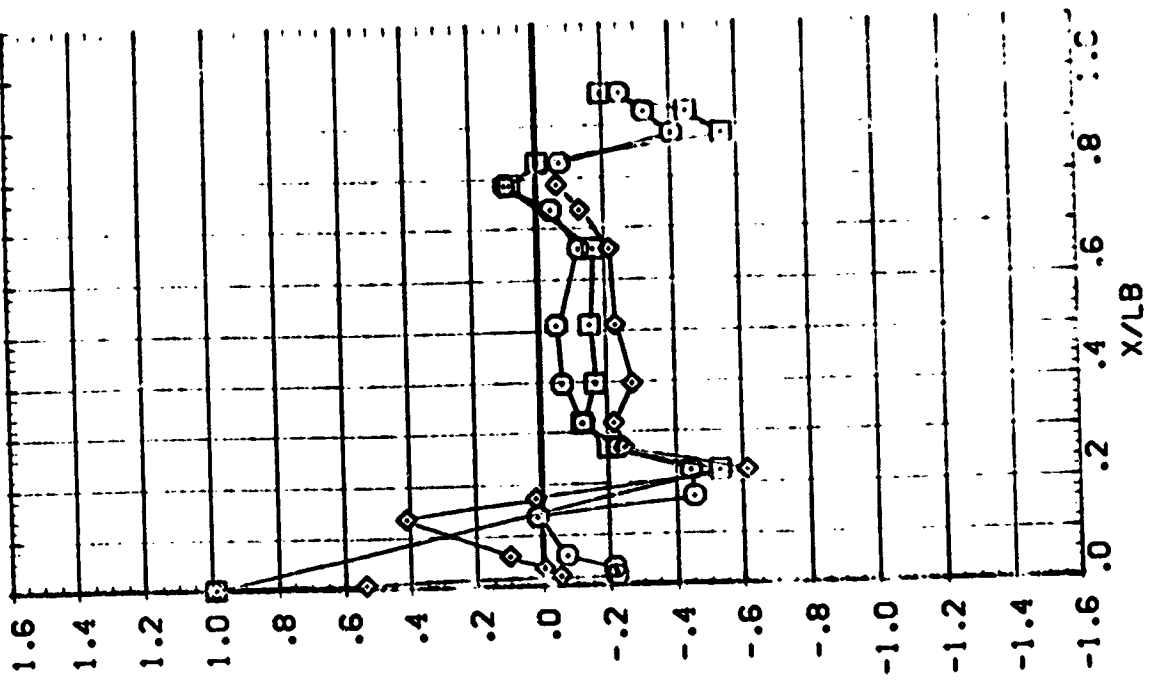
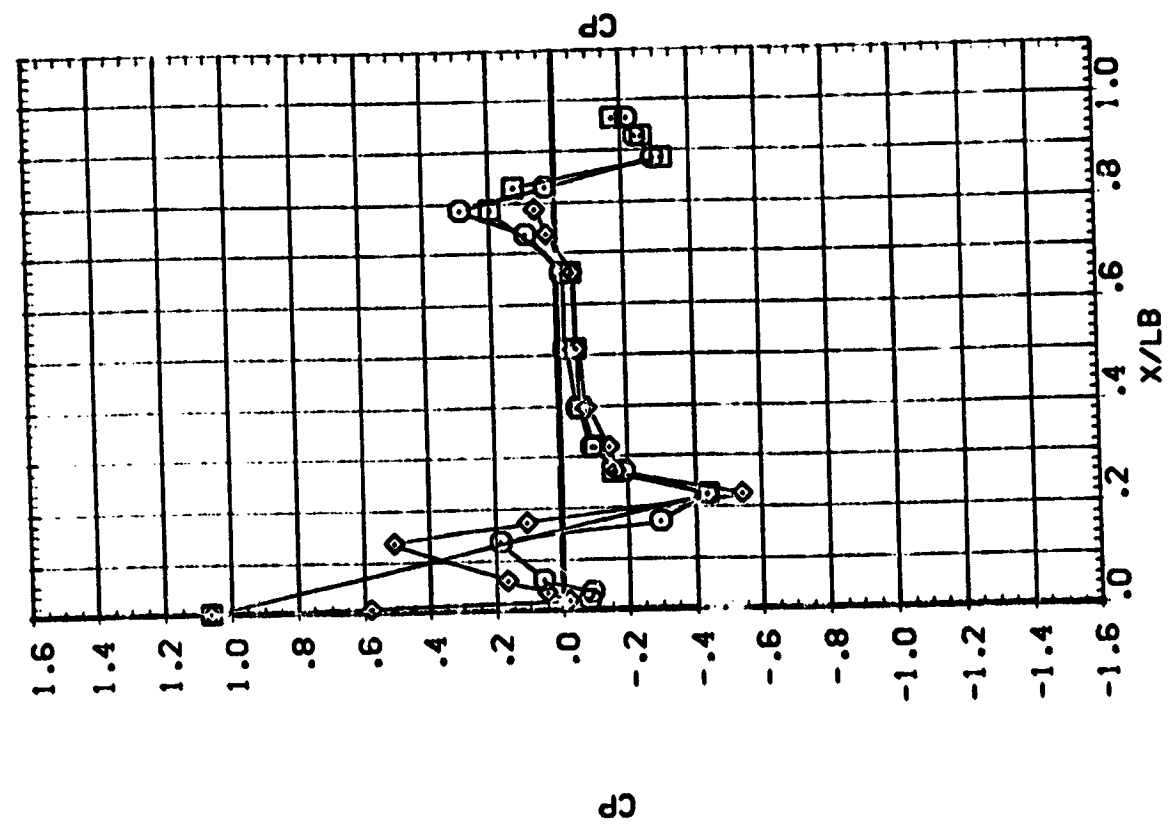


LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ALPHA
E: EYEN

[illegible]

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

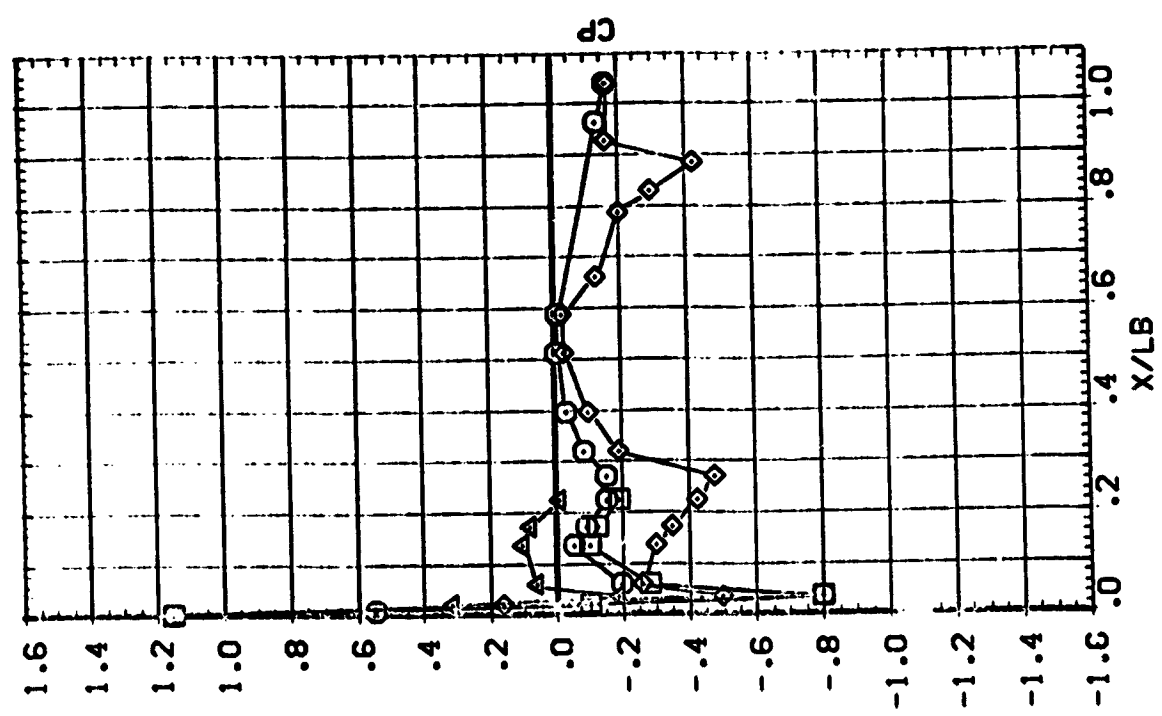
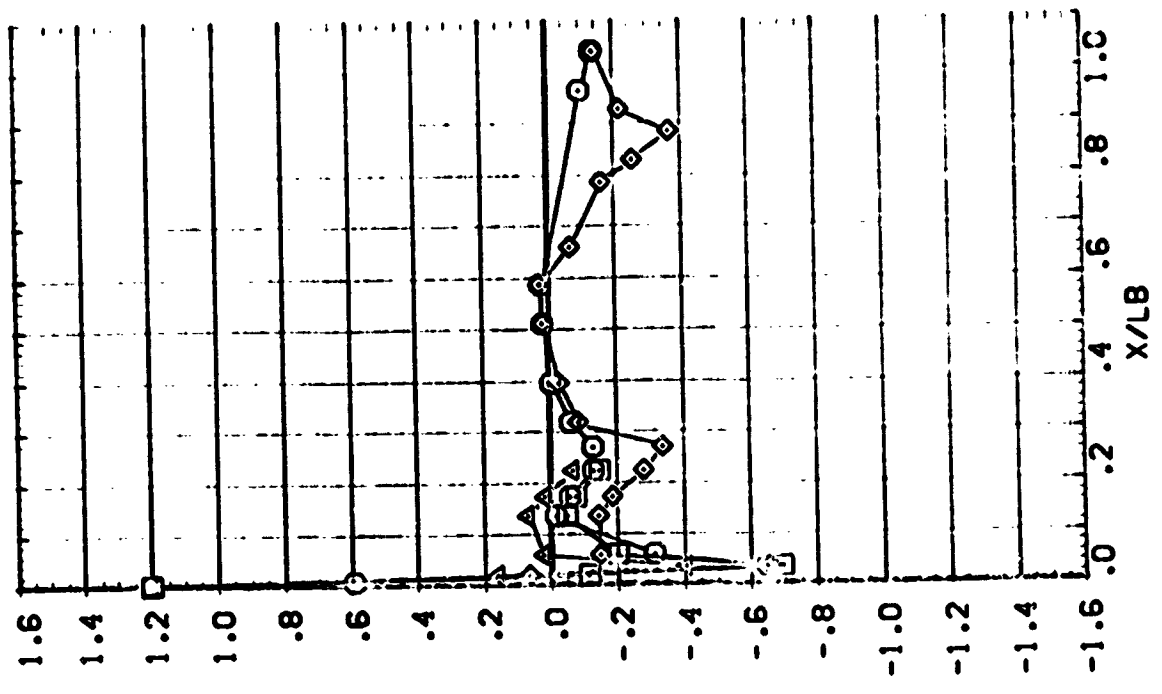
ALWA
 ELEVON
 .000
 .000
 .000
 .000
 .000
 .000

U/LW
 .004

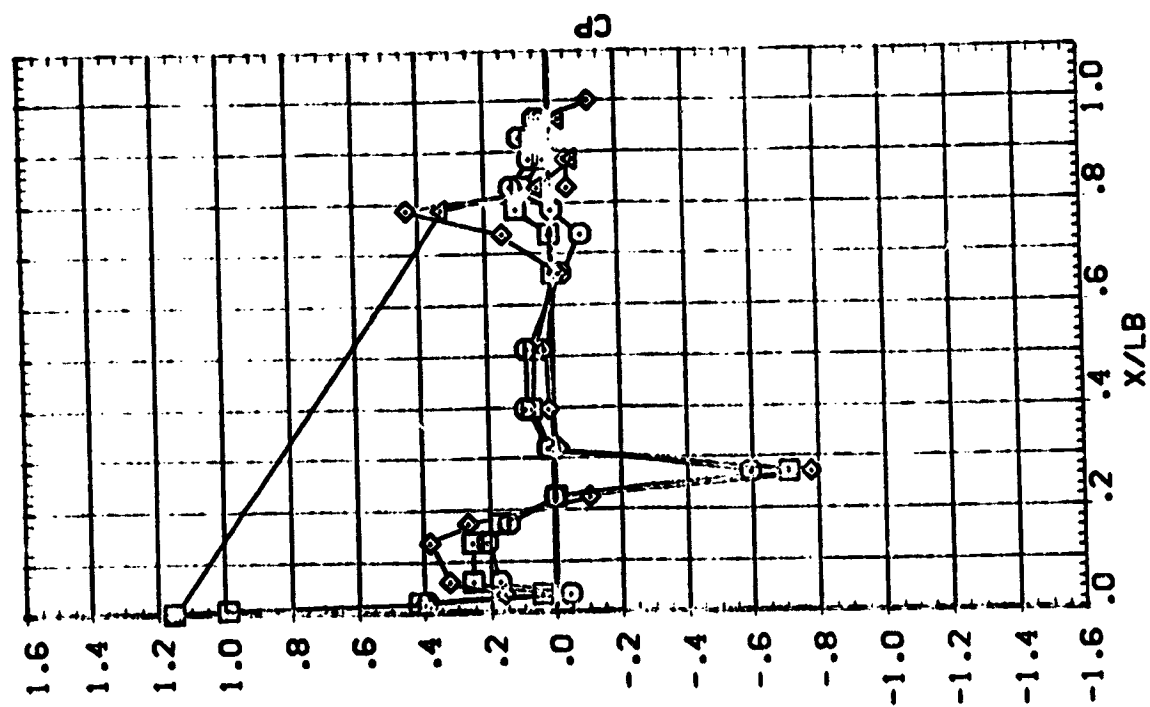
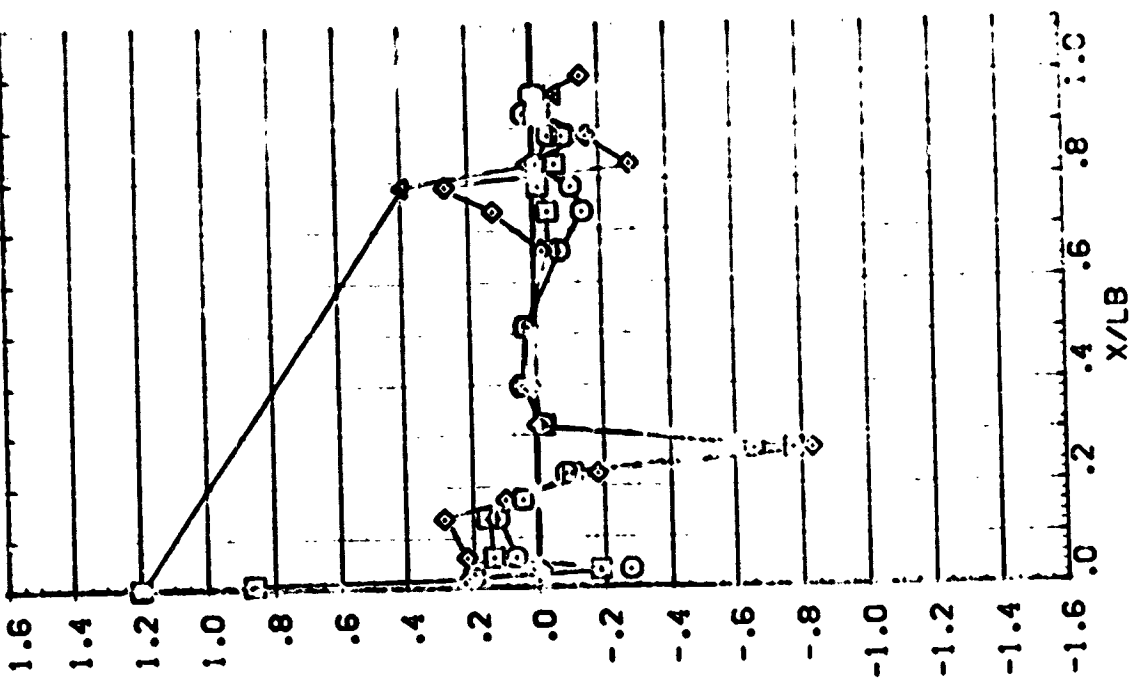
B/LW
 -10.150
 -5.040

P/L
 .000
 20.000
 40.000
 55.000

S/LW
 .000
 .000
 .000

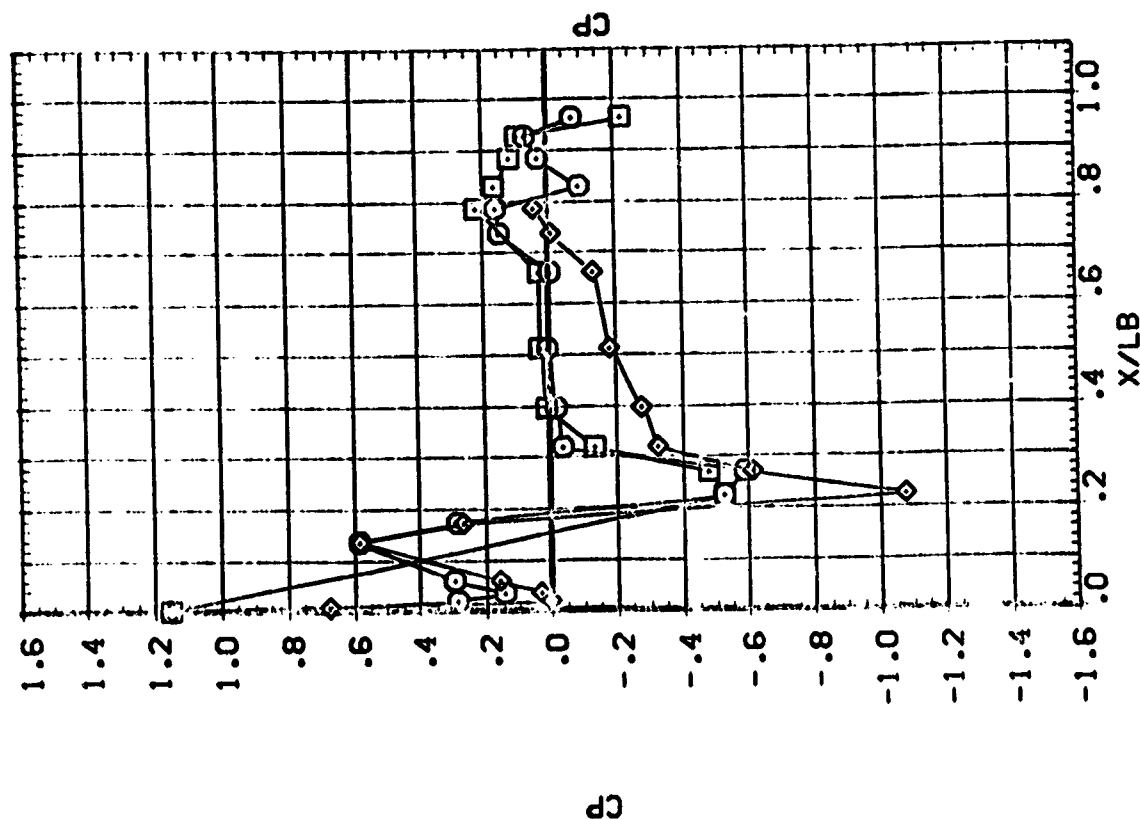
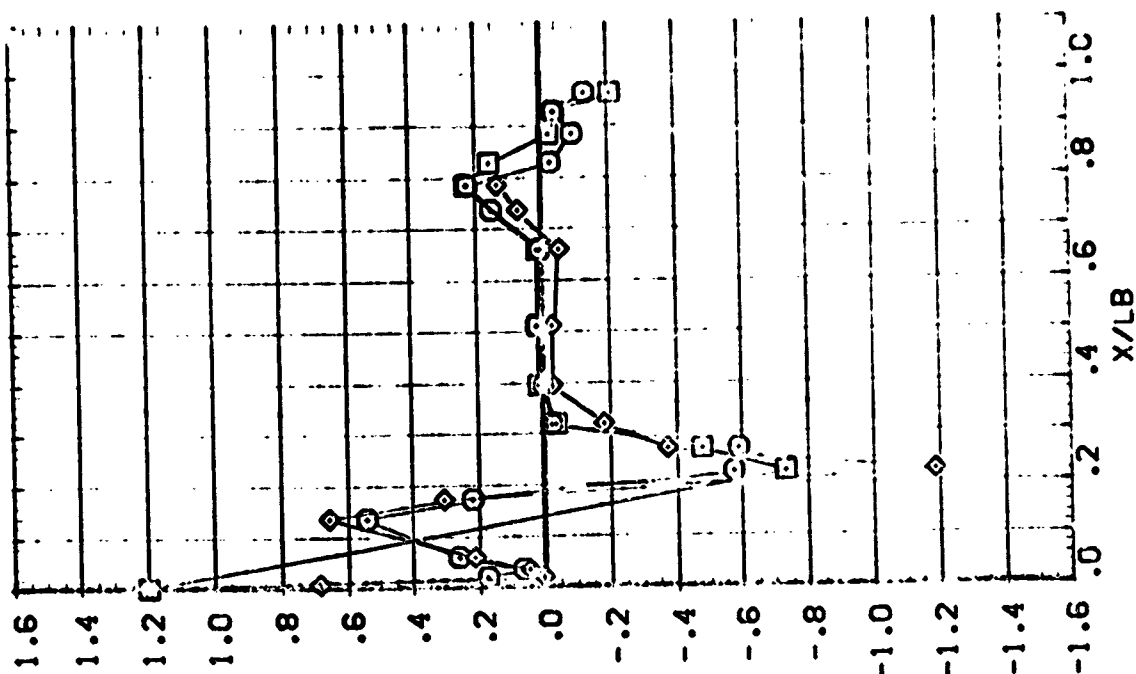


LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES



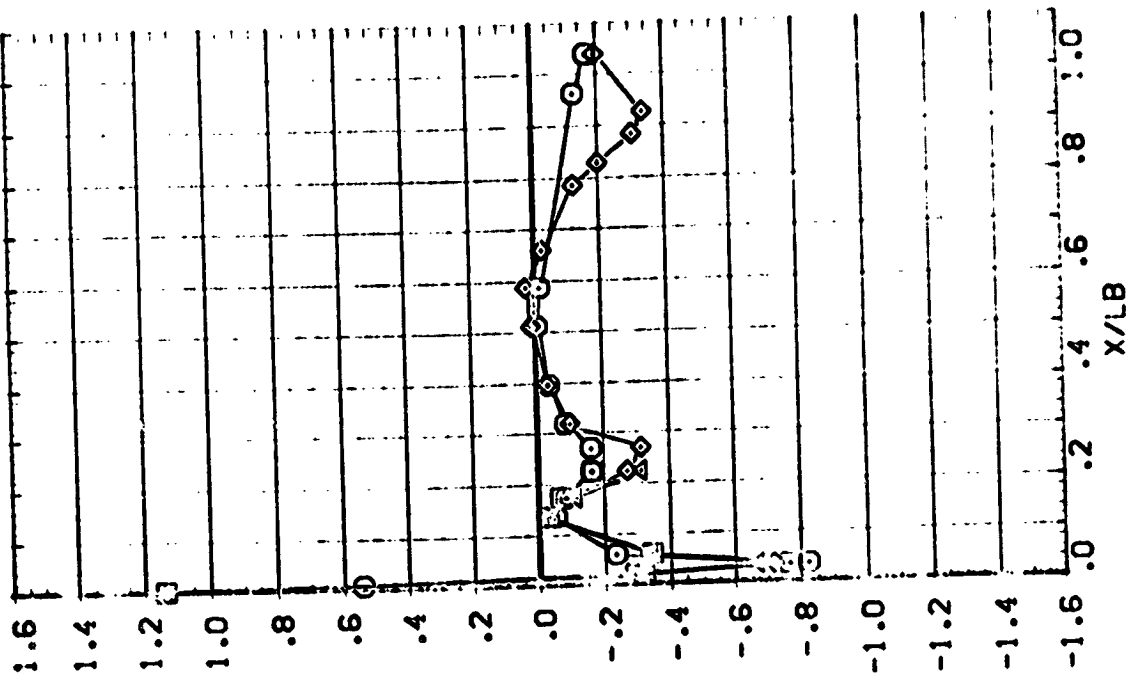
LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

SYNOPSIS	PH:	BETA	%ACH
○	150.000	-10.50	.504
I	165.000	-5.040	
◇	180.000		



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

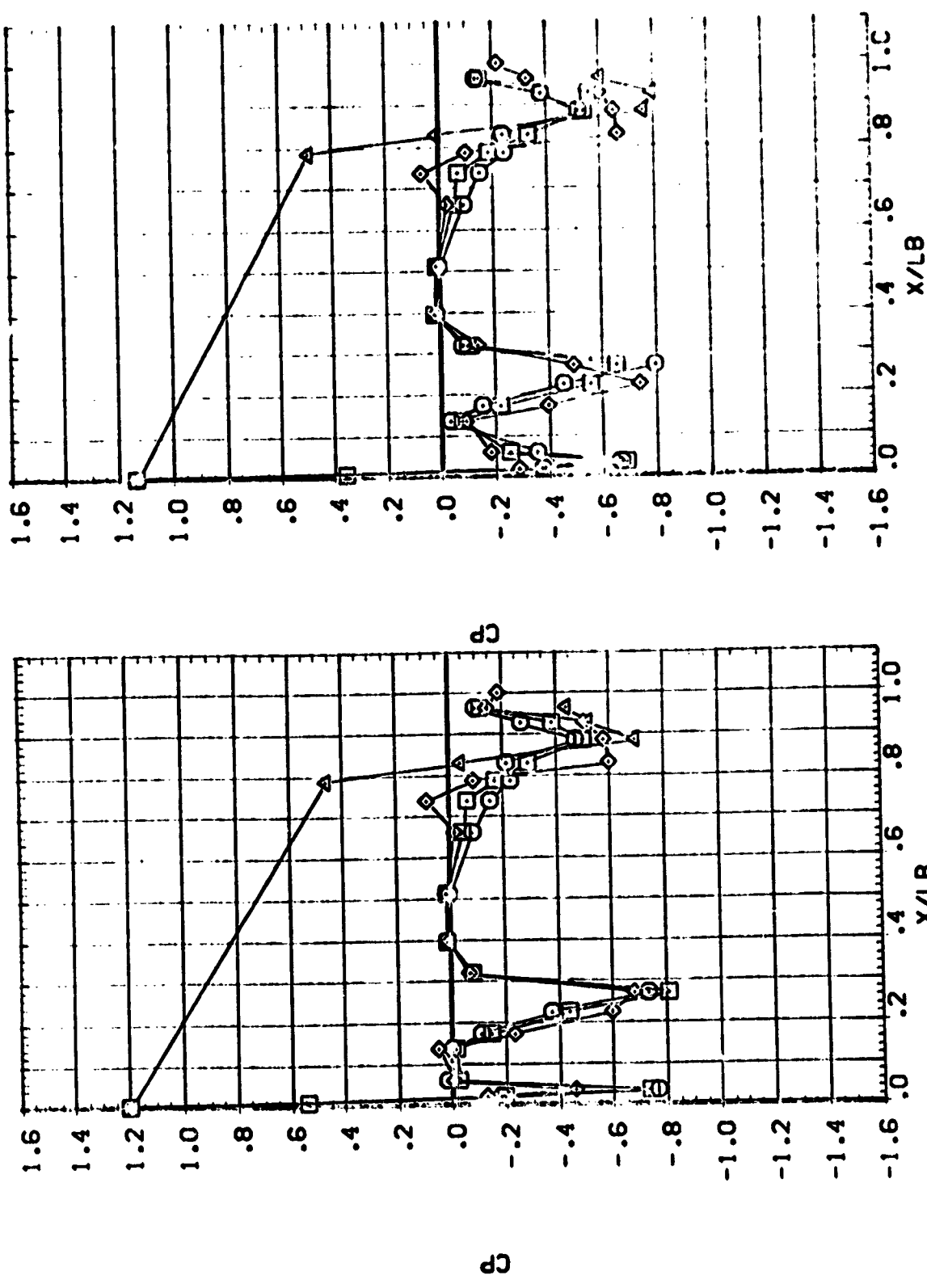
1000
 20.000
 40.000
 55.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

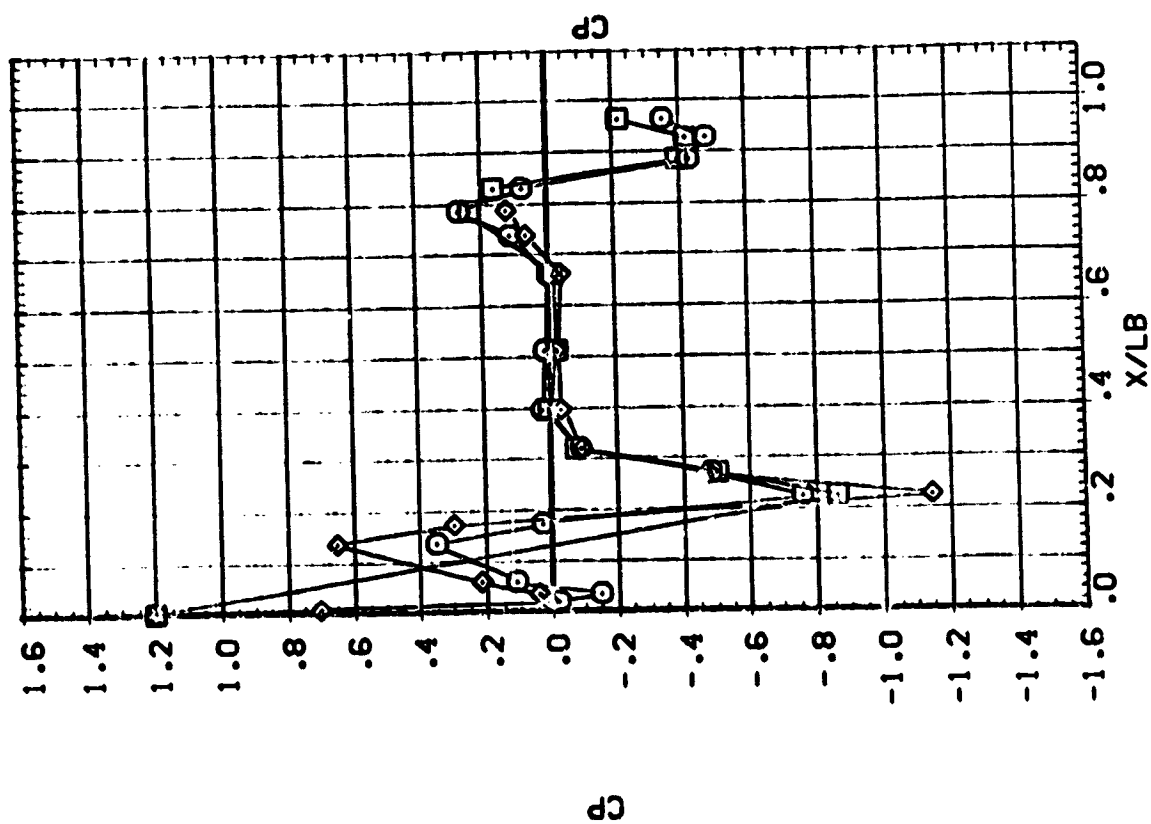
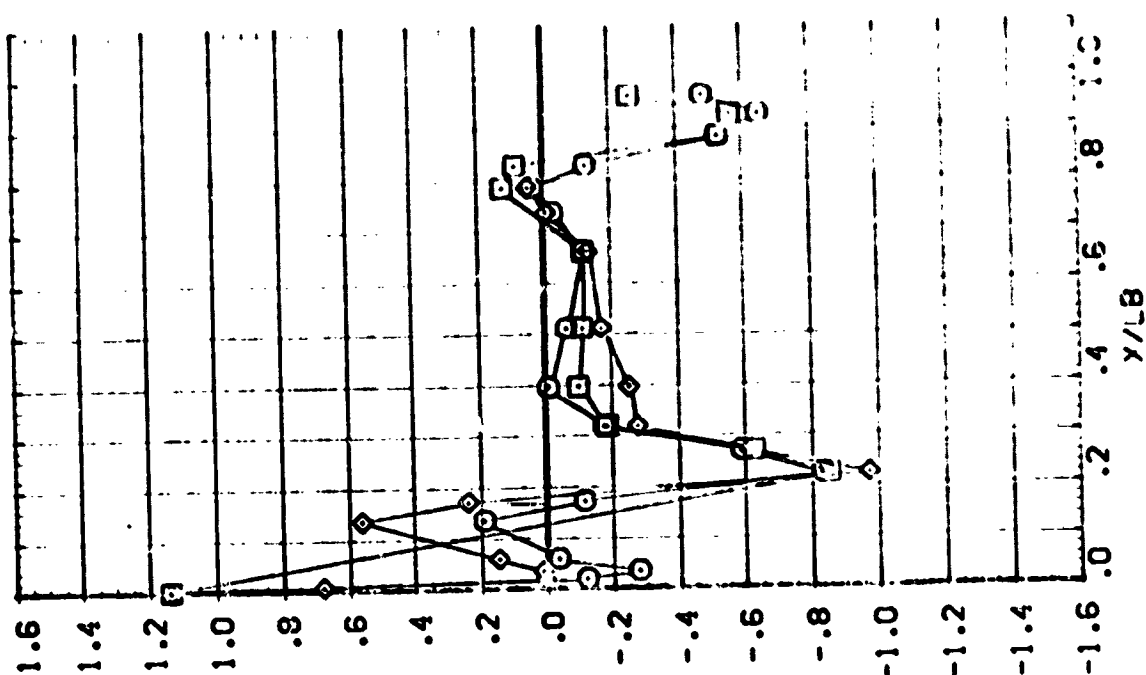
PARAMETRIC VALUES
 ALPHA 1.000
 ELEV 1.000
 RADIUS 1.000
 RADIUS 1.000

SYMBOLS
 70.000
 80.000
 90.000
 100.000
 110.000
 120.000
 130.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

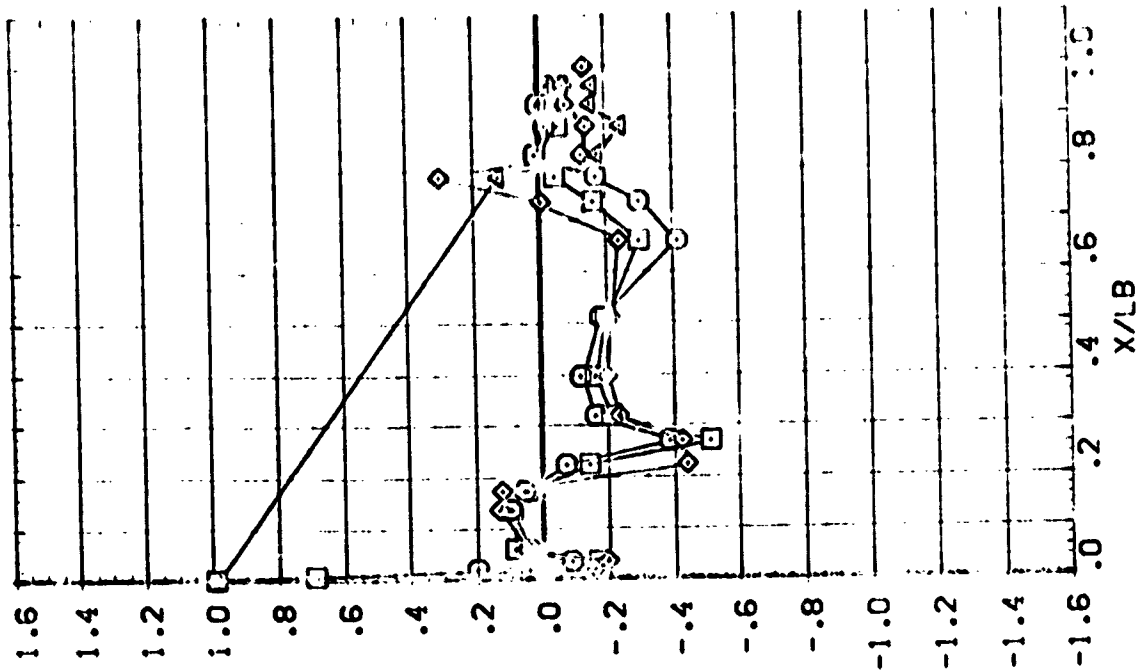
Time	Lat	Long	Wind	Sea	Weather
00:00	33:50	122:00	15	3	Cloudy
01:00	33:50	122:00	15	3	Cloudy
02:00	33:50	122:00	15	3	Cloudy
03:00	33:50	122:00	15	3	Cloudy
04:00	33:50	122:00	15	3	Cloudy
05:00	33:50	122:00	15	3	Cloudy
06:00	33:50	122:00	15	3	Cloudy
07:00	33:50	122:00	15	3	Cloudy
08:00	33:50	122:00	15	3	Cloudy
09:00	33:50	122:00	15	3	Cloudy
10:00	33:50	122:00	15	3	Cloudy
11:00	33:50	122:00	15	3	Cloudy
12:00	33:50	122:00	15	3	Cloudy
13:00	33:50	122:00	15	3	Cloudy
14:00	33:50	122:00	15	3	Cloudy
15:00	33:50	122:00	15	3	Cloudy
16:00	33:50	122:00	15	3	Cloudy
17:00	33:50	122:00	15	3	Cloudy
18:00	33:50	122:00	15	3	Cloudy
19:00	33:50	122:00	15	3	Cloudy
20:00	33:50	122:00	15	3	Cloudy
21:00	33:50	122:00	15	3	Cloudy
22:00	33:50	122:00	15	3	Cloudy
23:00	33:50	122:00	15	3	Cloudy



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

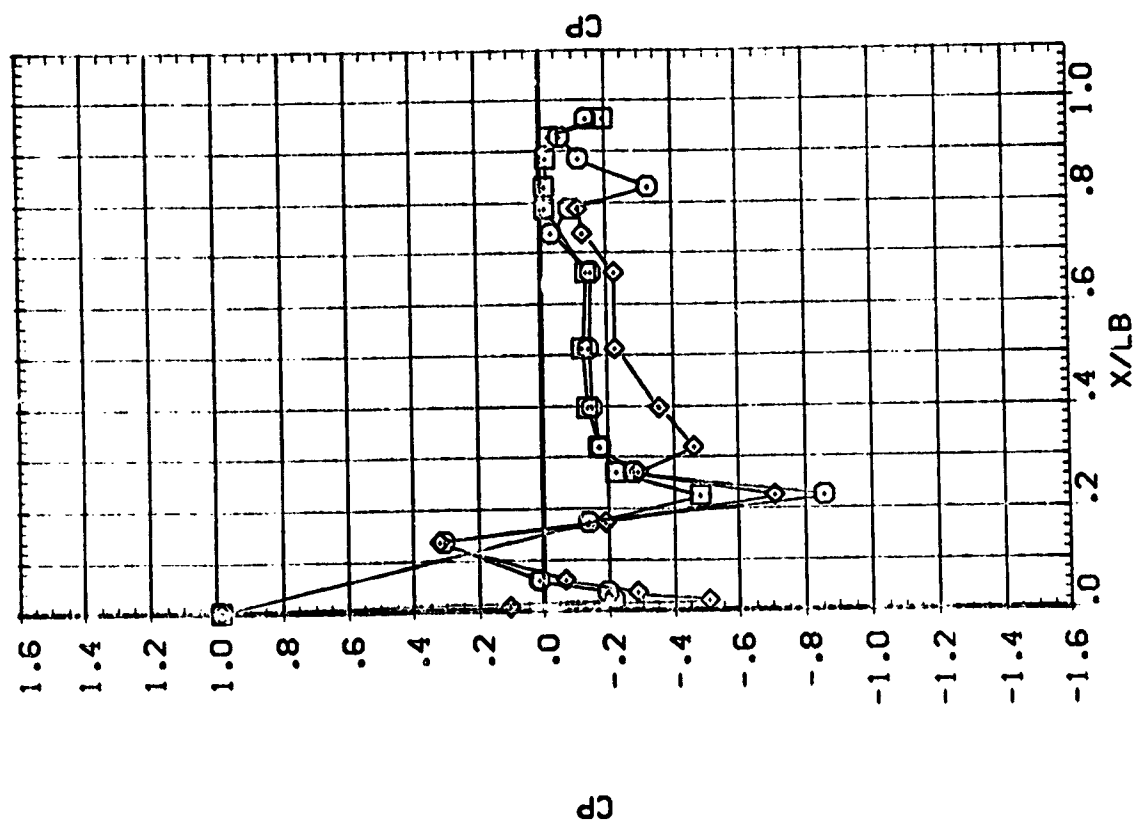
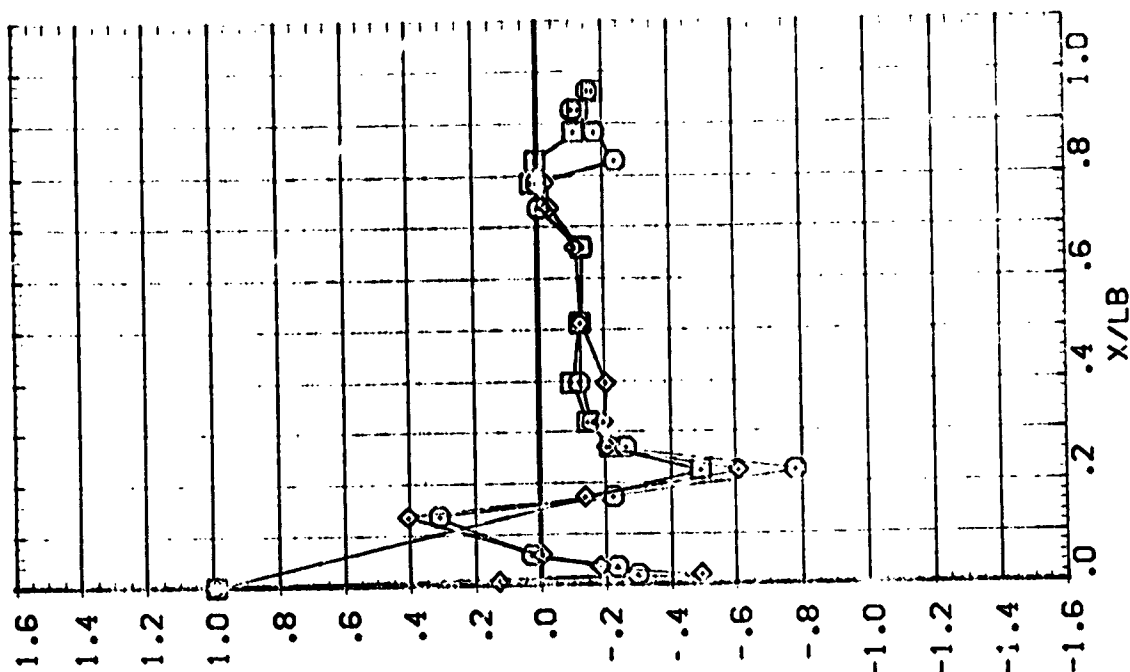
二

99



PARAMETRIC VALUES
 A-B-A RUDER .000
 ELEVON .000 RUDER .000

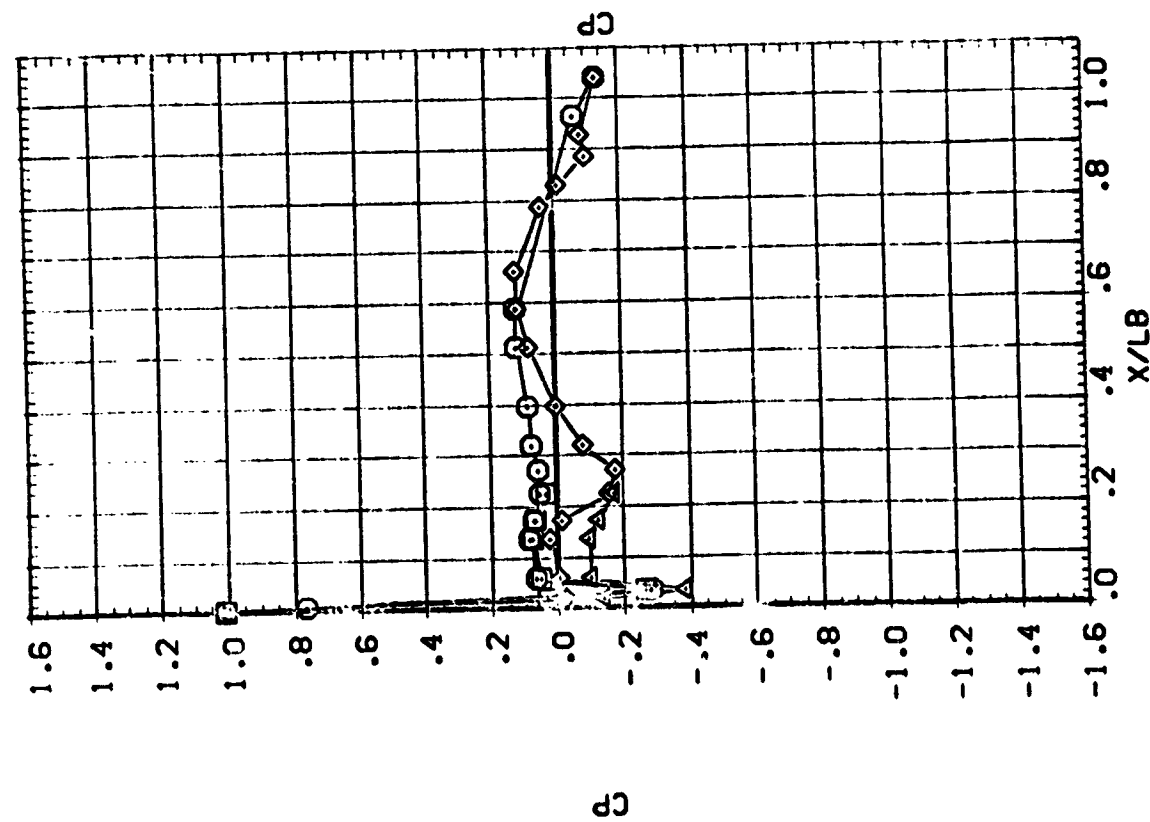
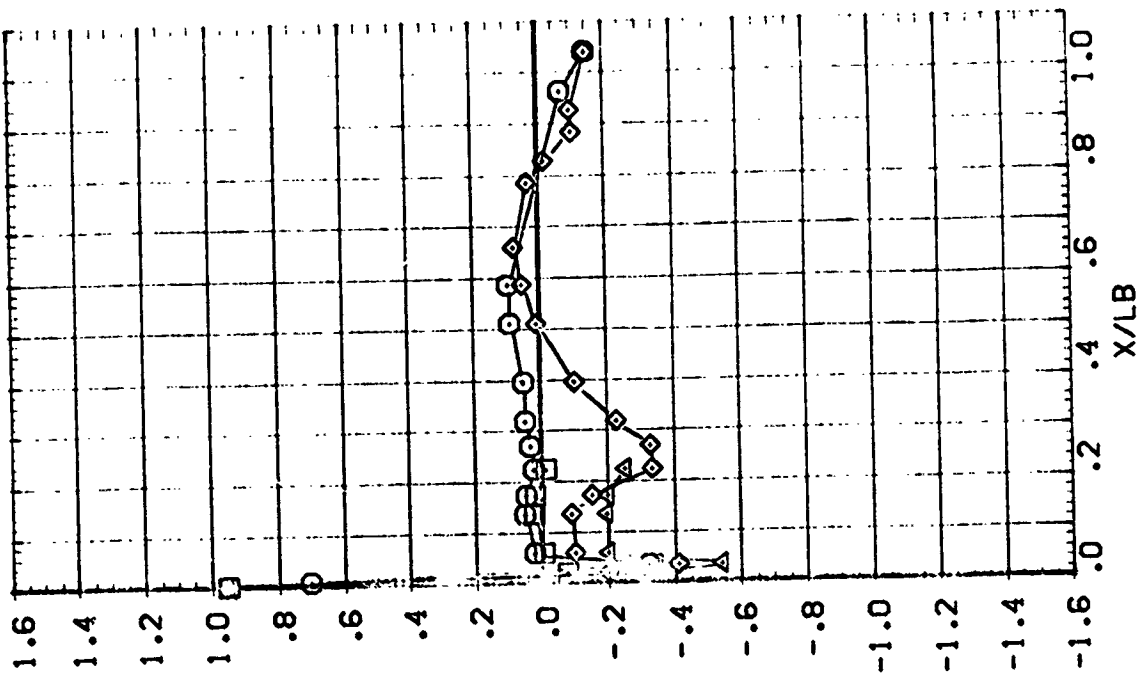
SVWC- PH1 BETA MACH
 :50.000 -10.110 .598
 :65.000 -5.020
 :80.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

40.000
55.000

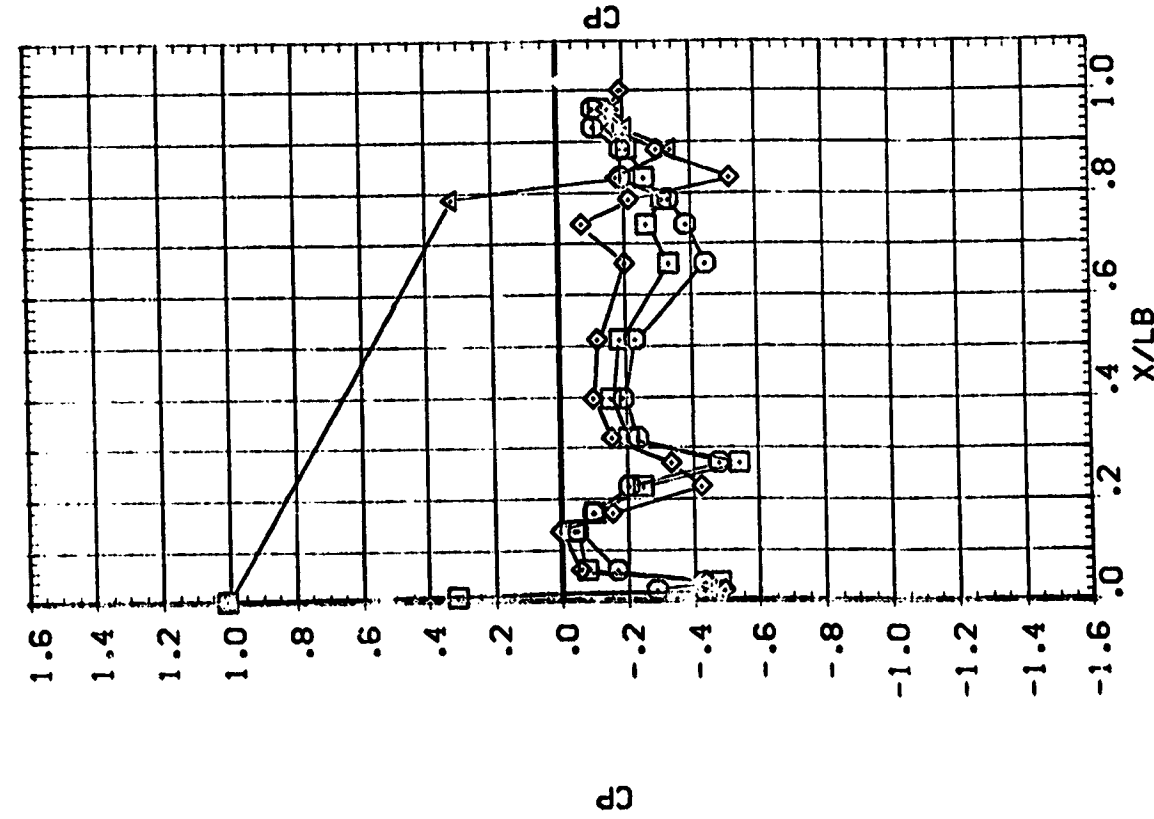
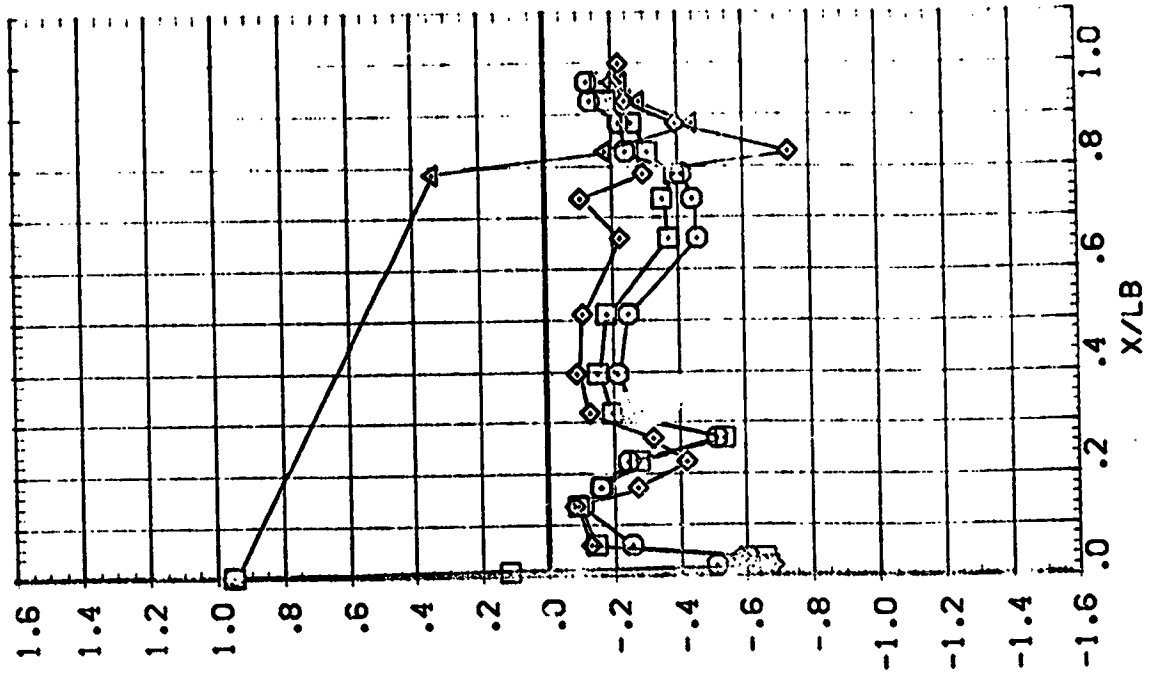
◇
△



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ALPHA
 ELEVON
 10.000
 .000
 RUDER
 RUDER
 .000
 .000

SYMBO:
 PH:
 70.000
 50.000
 20.000
 35.000
 BE TA
 5.170
 10.270
 MACH
 .596

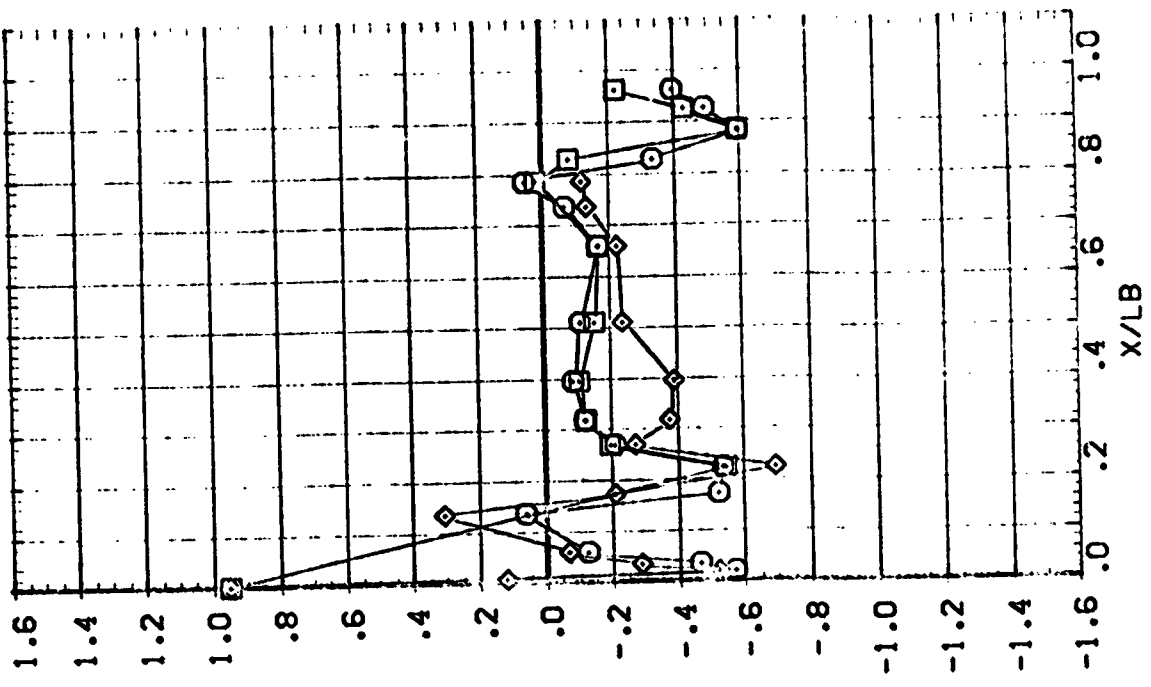
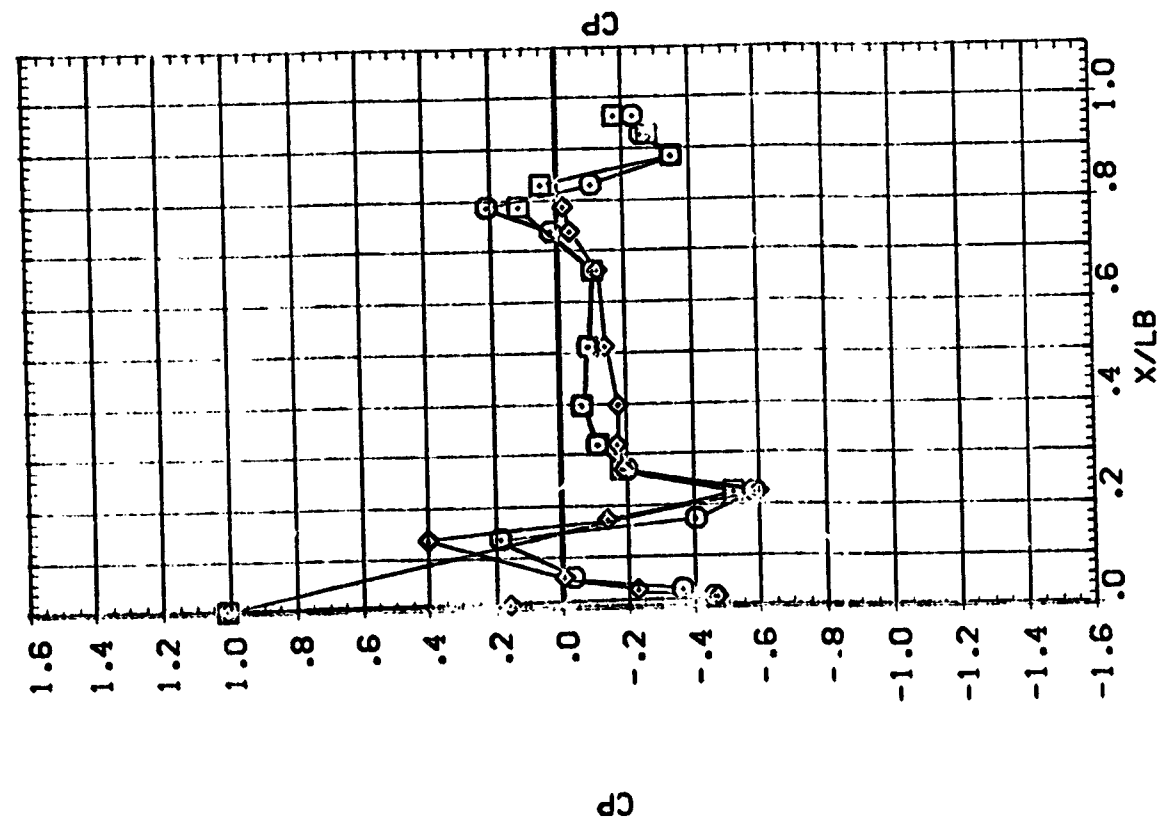


LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

1111111111

SV-EC
 PH-1
 BETA
 MACH
 150.000
 5.170
 165.000
 10.270
 180.000

PARAMETRIC VALUES
 ALPHA
 ELEVON
 10.000
 .000
 RUDER
 .000
 RUFLER
 .000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

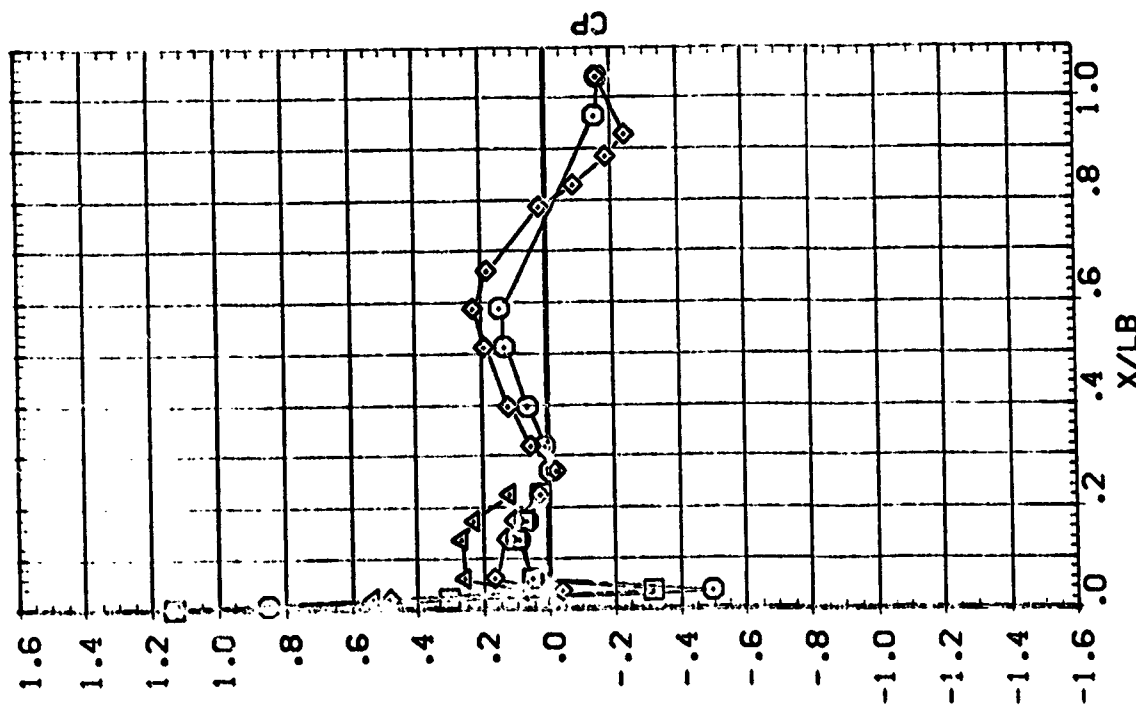
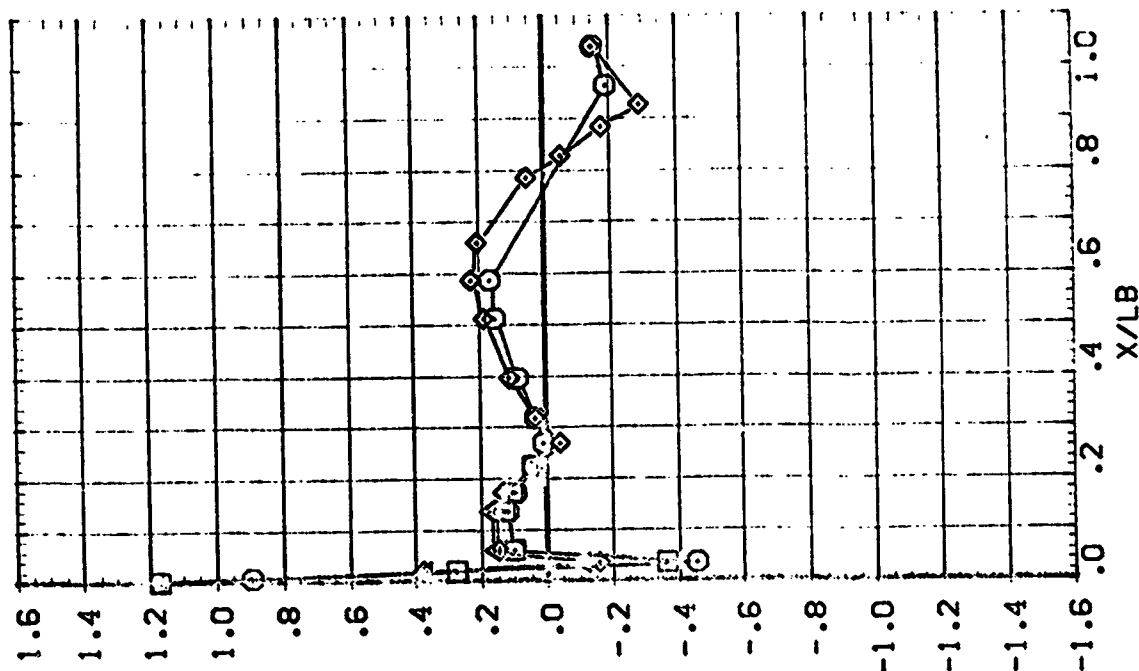
PARAMETRIC VALUES
:0.000 R_UDEP
:0.000 R_UDEP

ALPHA
ELEVON

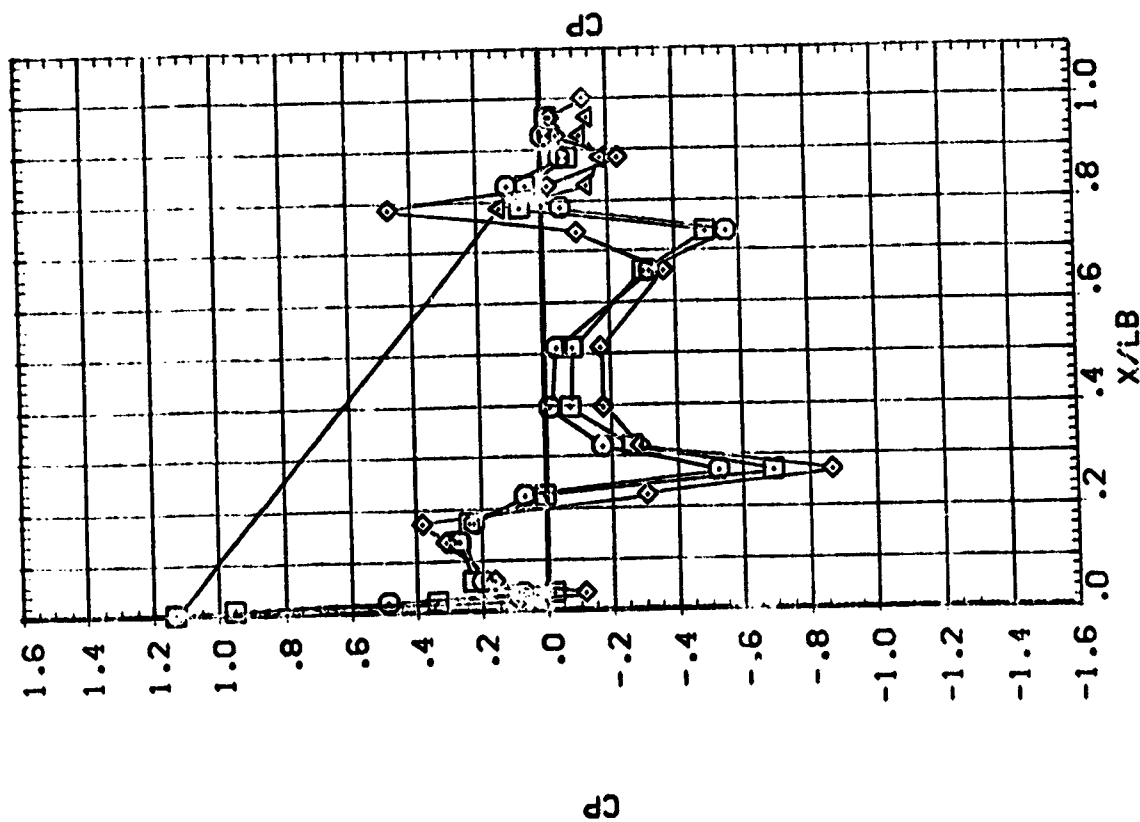
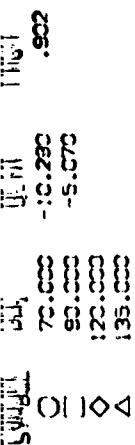
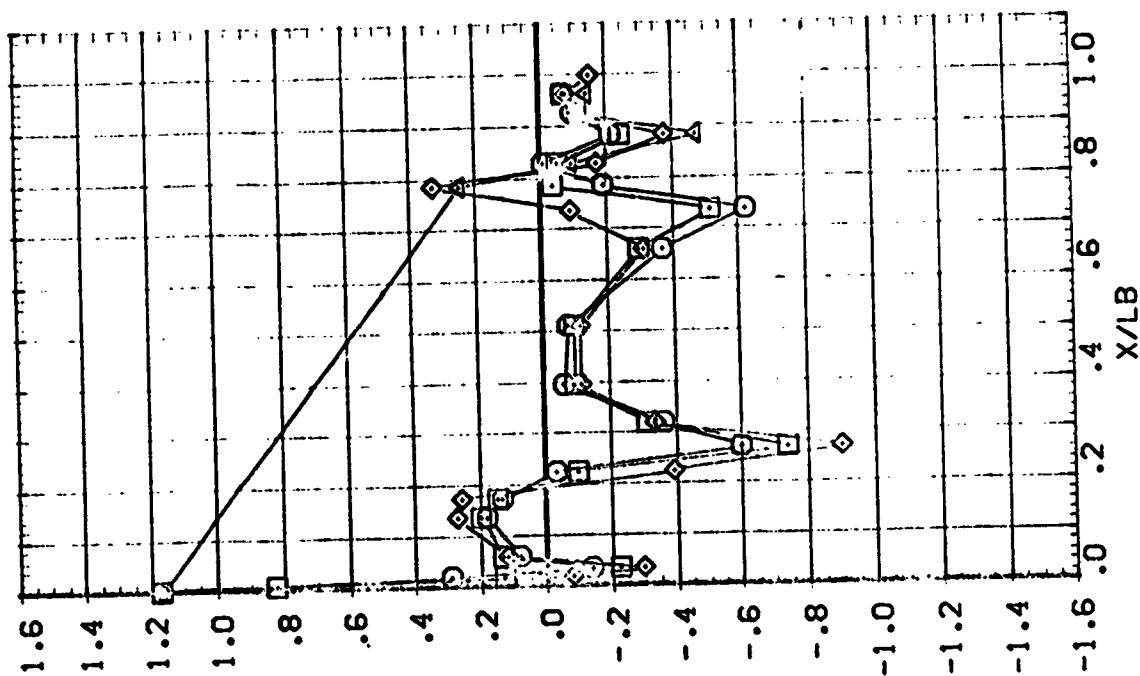
SV-BC-
:0.000
20.000
40.000
55.000

BETA
-10.23C
-5.07C

MACH
.902



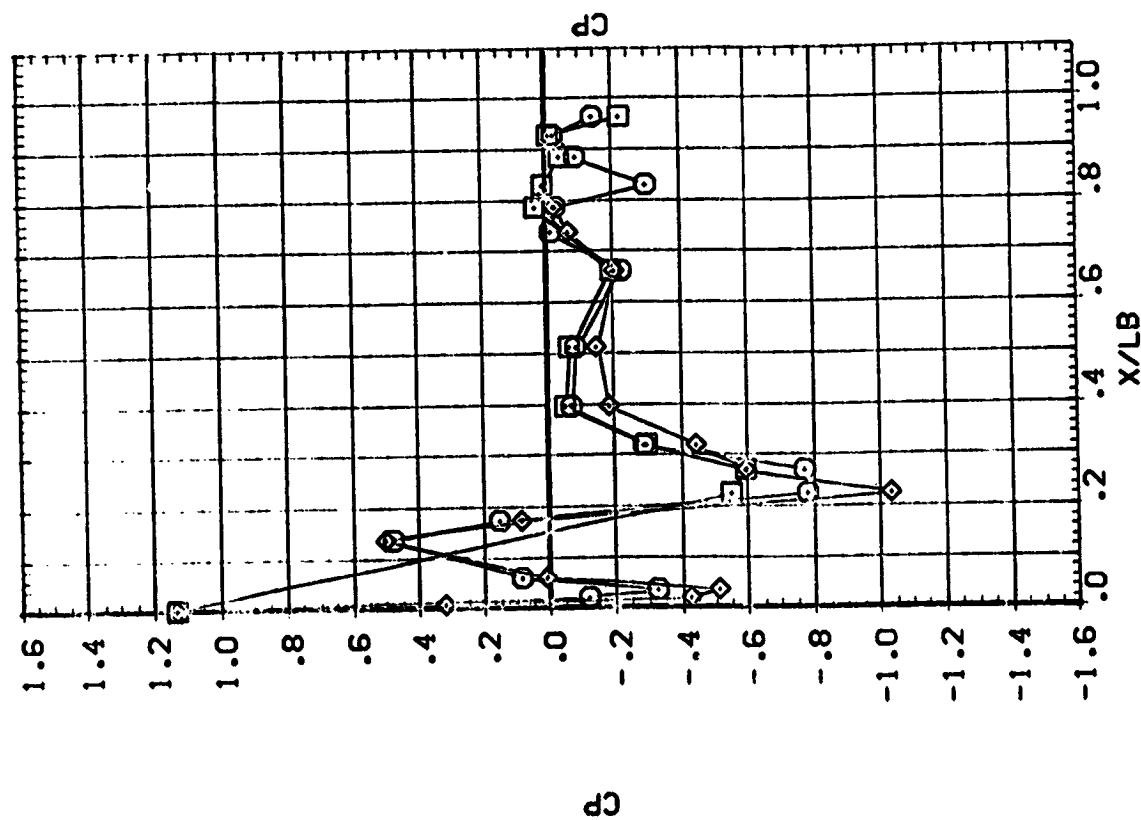
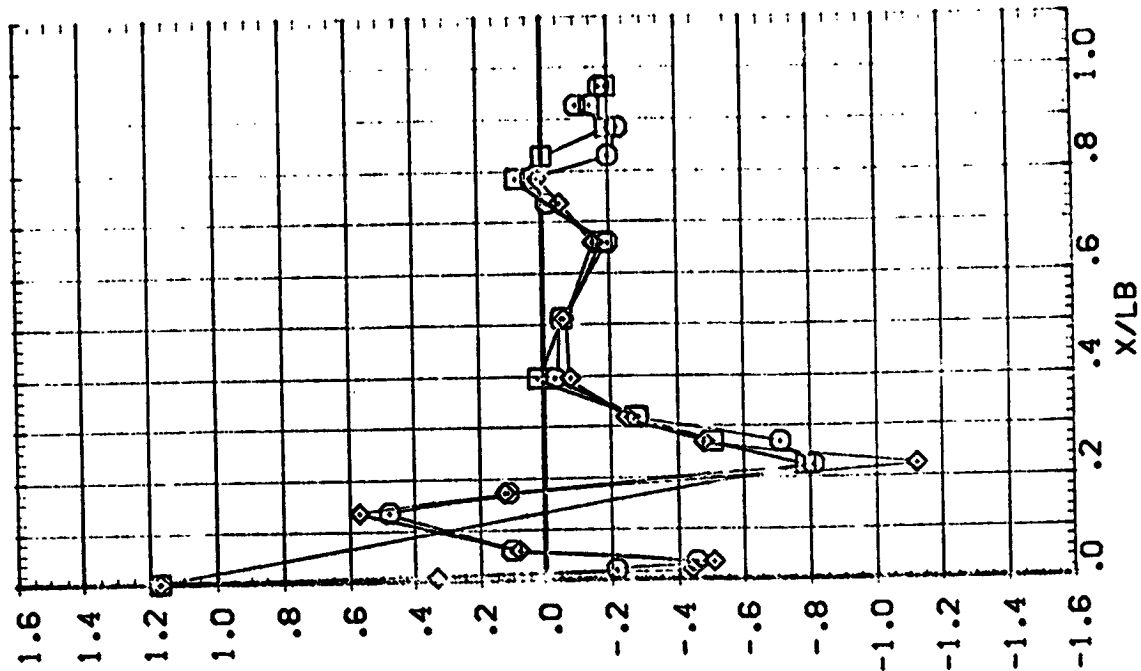
LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

PARAMETRIC VALUES
 ALPHA 10.000
 ELEVON .000
 RUDDER .000
 RUFLER .000

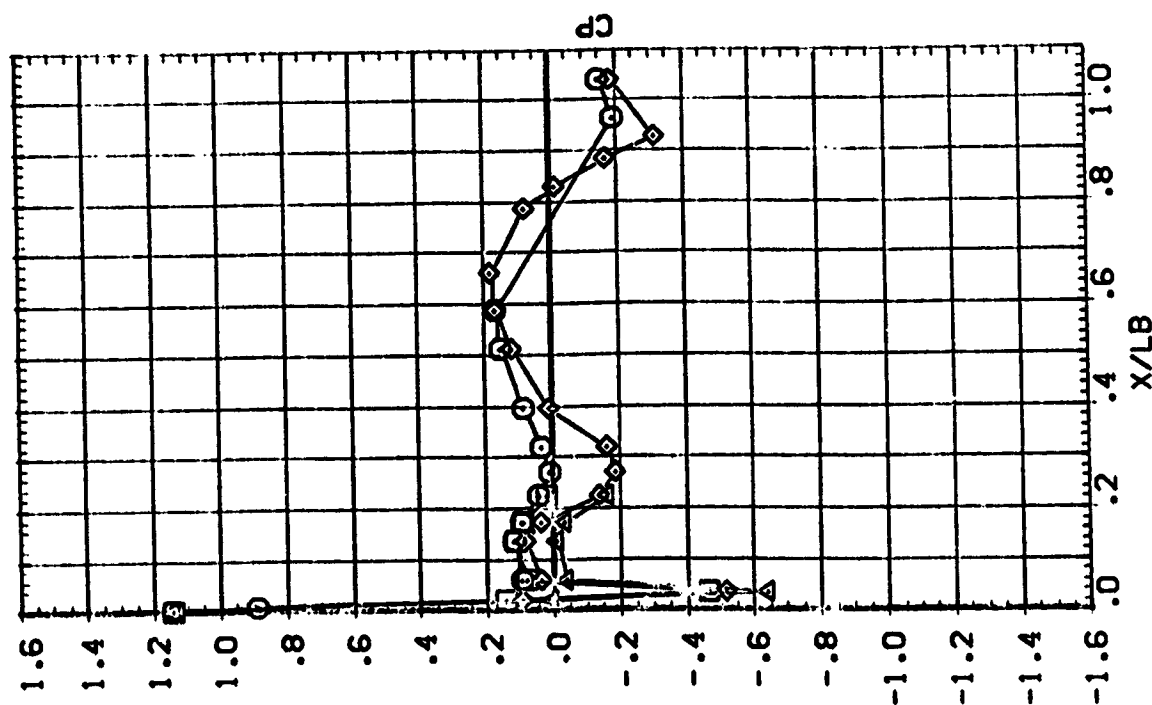
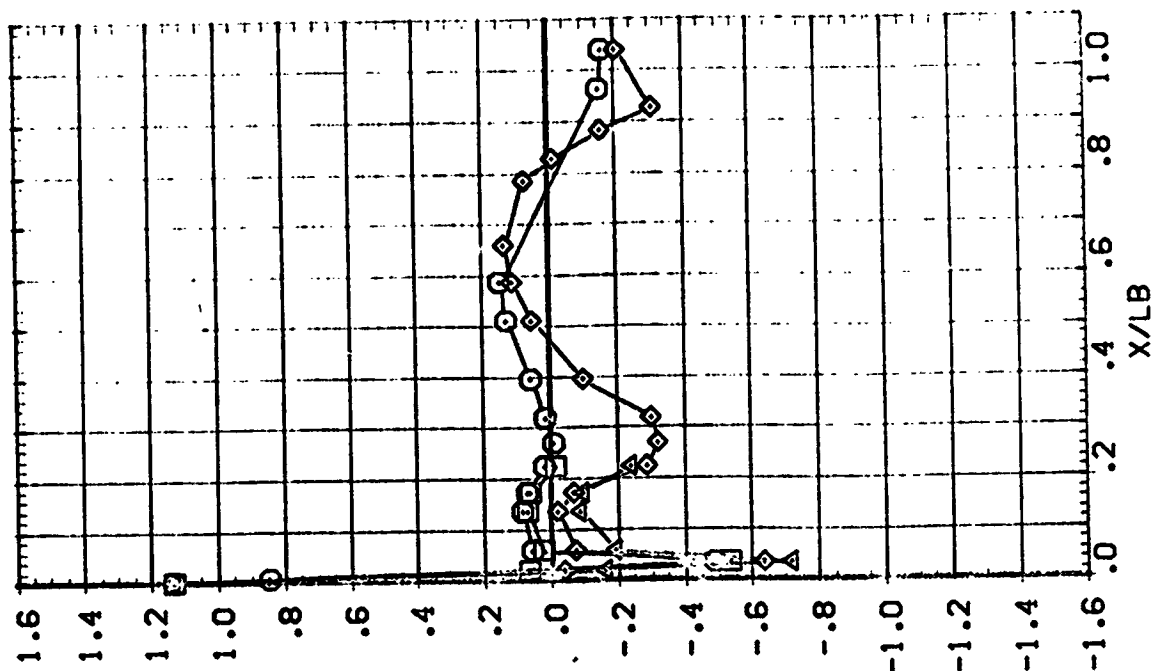
SYNTH-
 ()
 ()
 ()



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

Summary

SWAGE	PAI	BETA	MACH
001010	.000	5.230	.902
001010	20.000	10.390	
001010	40.000		
001010	55.000		



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

57 334c

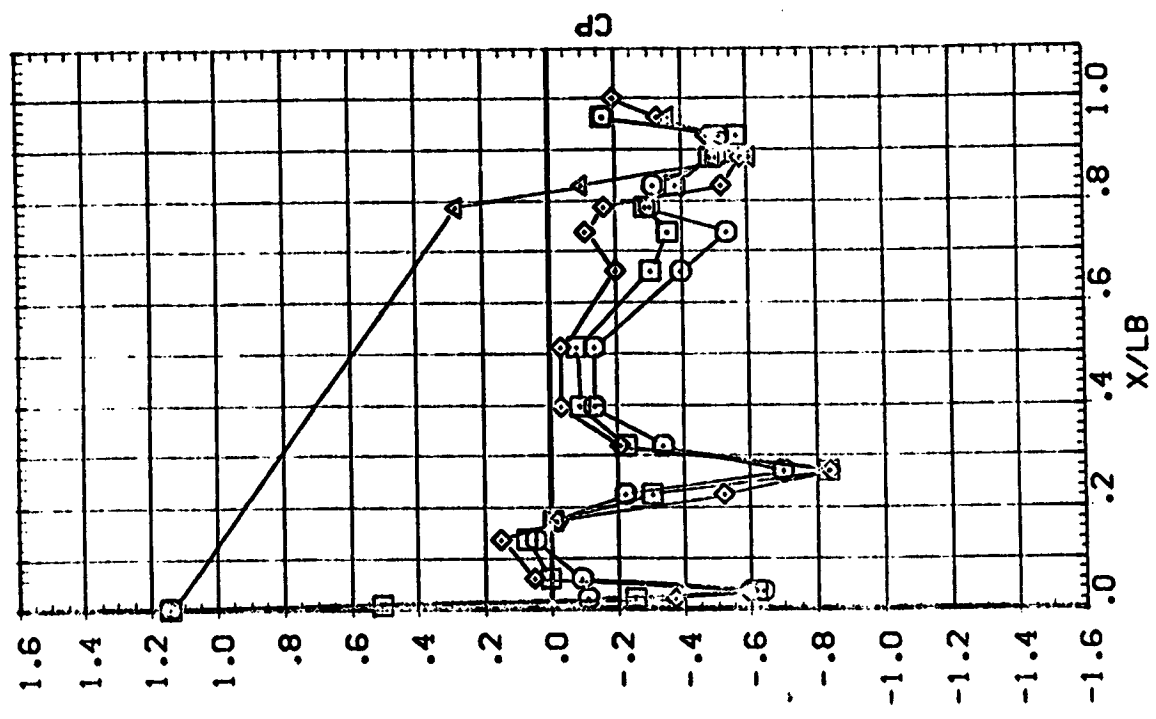
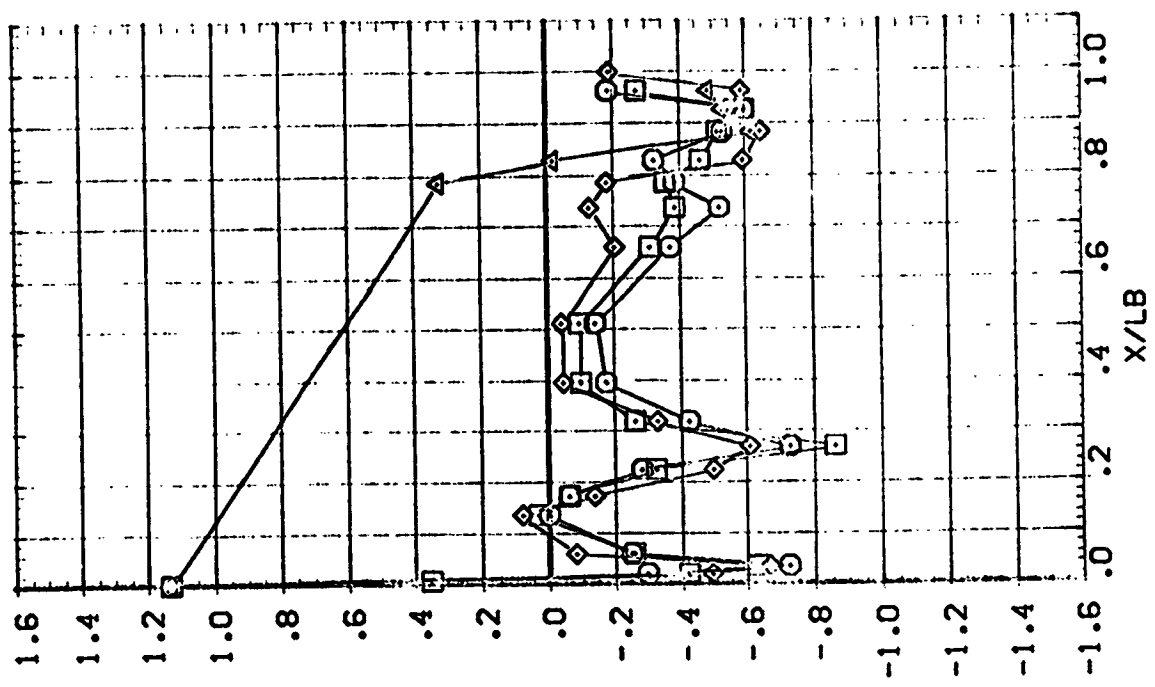
SWAGL
□
◇
△

PH: 70.000
90.000
120.000
135.000

BETA 5.230
10.380

MACH .902

PARAMETRIC VALUES
ALPHA 10.000
ELEVON .000
RUDDER .000
RUJFLR .000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

FINNISH

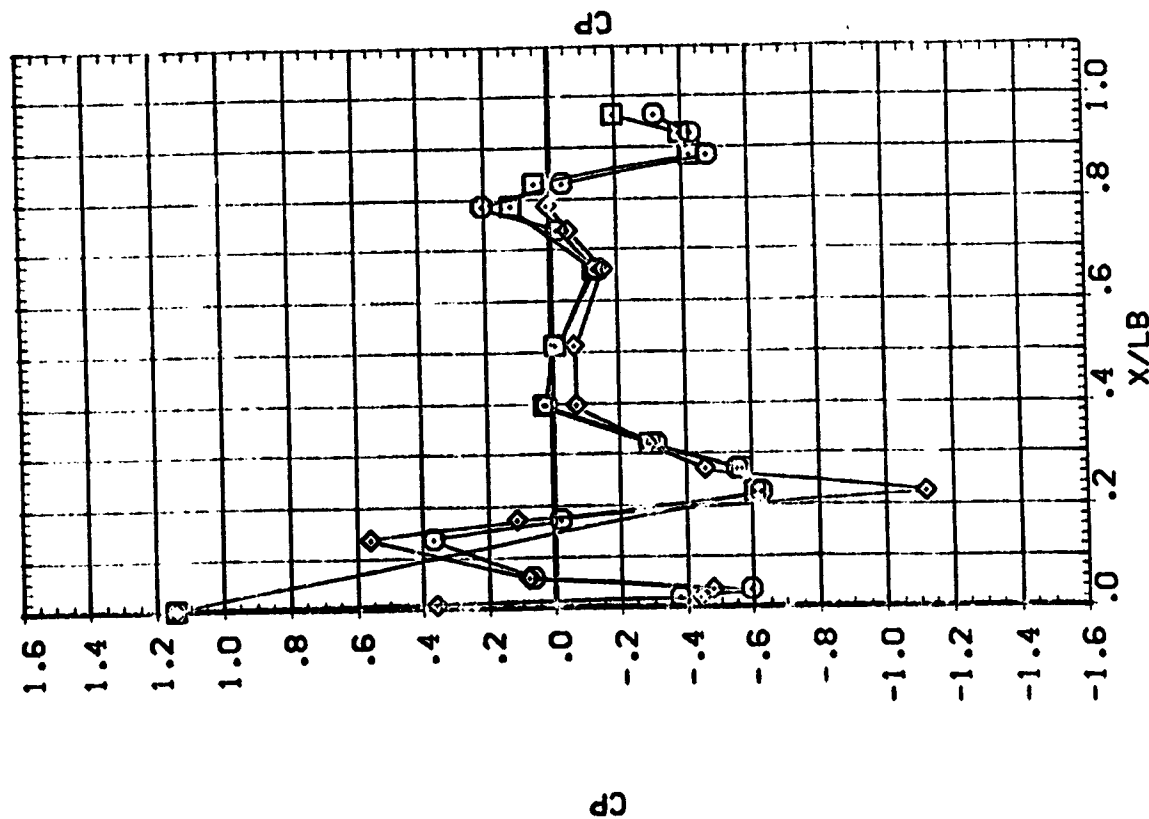
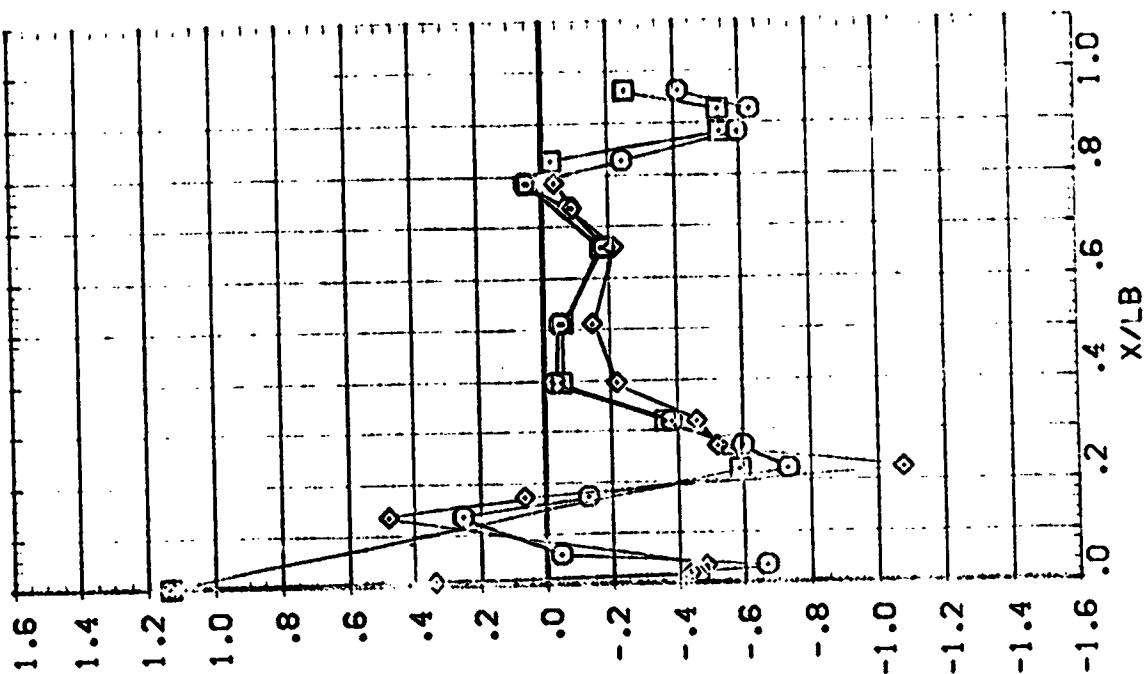
TODAS

PHI	BETA
150.000	5.230
165.000	10.390
180.000	

MACH .002

ALPHA	PARAMETRIC VALUES
ELEVEN	10.000 R000P
	.000 R00FLR

;;



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

37
PAGE

ORBITER FUSELAGE (RBPB06)

AVES 11-707 CA:2 02A

SYNCD-
O I D Δ

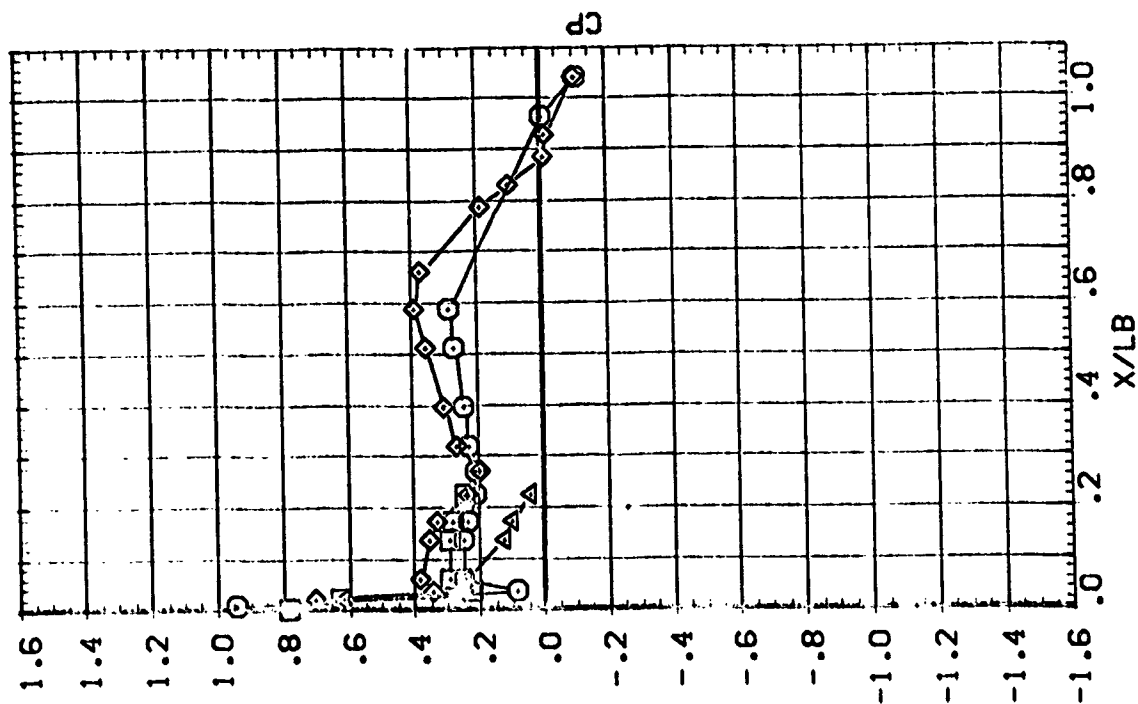
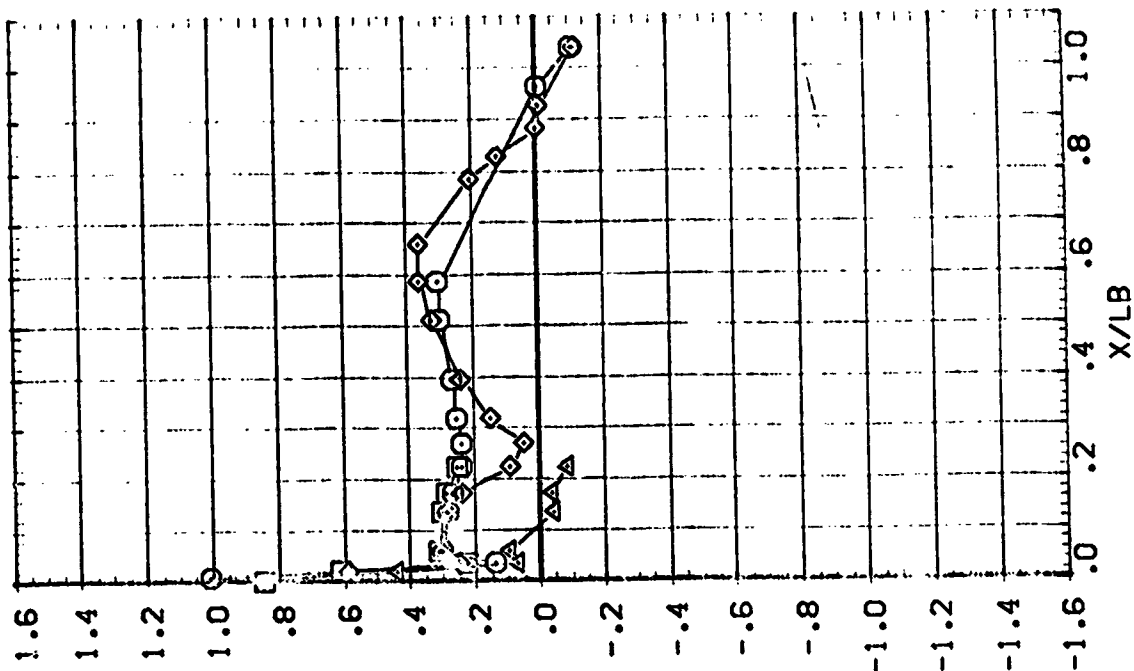
PH: .000
20.000
40.000
55.000

BETA -10.030
-4.970

MAC- .596

PARAMETRIC VALUES
20.000 R000R
.000 R00FLP

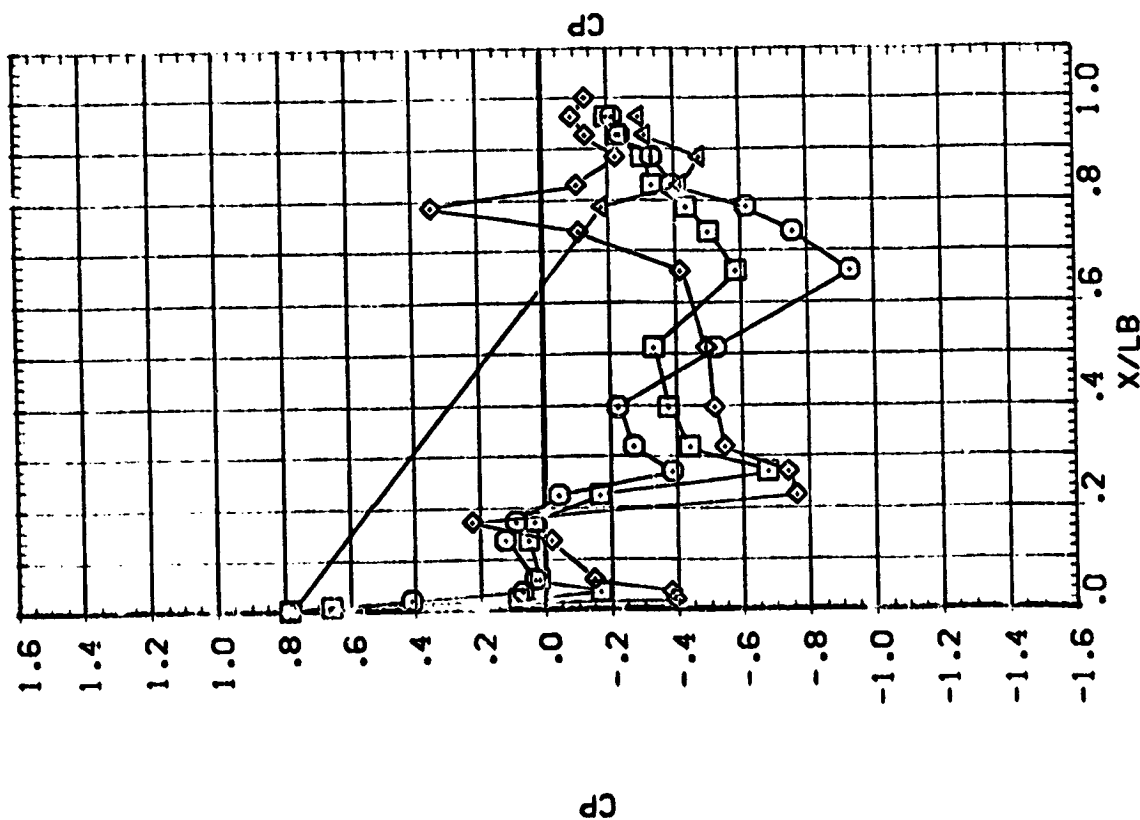
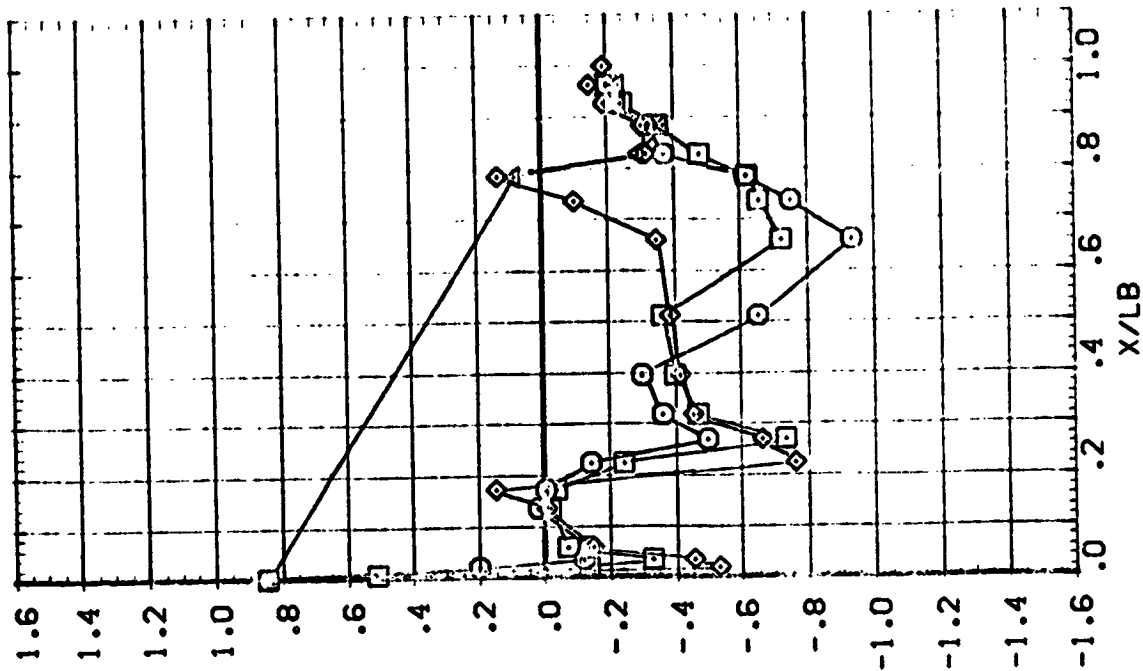
ALPHA
ELEVON



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

PARAMETRIC VALUES
70.000 80.000 90.000
ALPHA 0.000 0.000 0.000
ELEVON 0.000 0.000 0.000

SYMBOL
70.000 80.000 90.000 100.000 110.000
BETA -10.030 -4.970
MACH .596
0.000 0.000 0.000 0.000 0.000



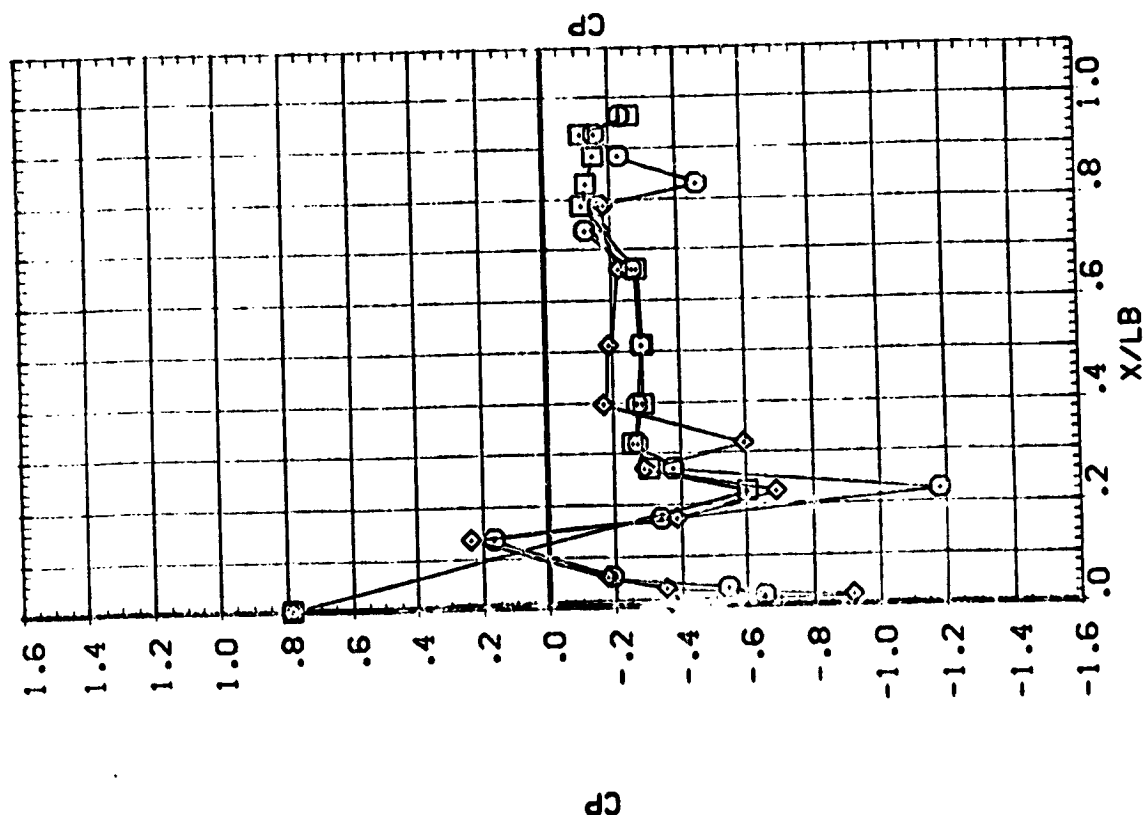
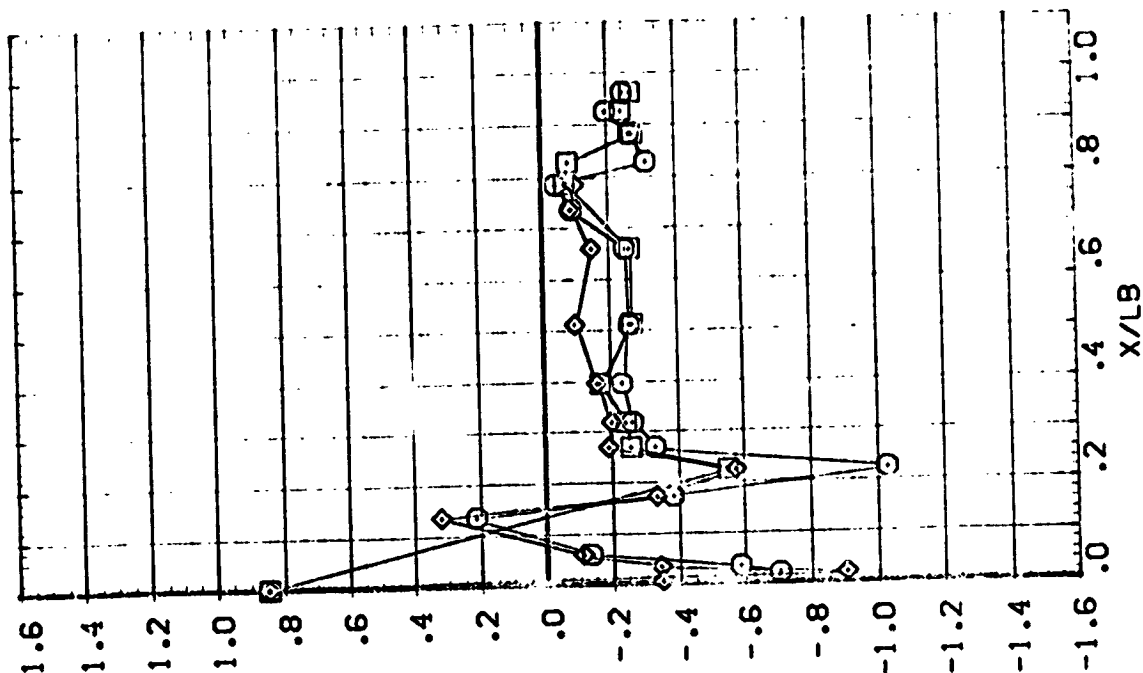
LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (R3PBCS)

AVES 11-707 CA12 C2A

PARAMETRIC VALUES
 ALPHA 20.000 RUDER .000
 ELEVON .000 RUFLAP .000

SYMBOLS
 P41 150.000 BETA -10.030 MACH .595
 155.000 -4.970
 180.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

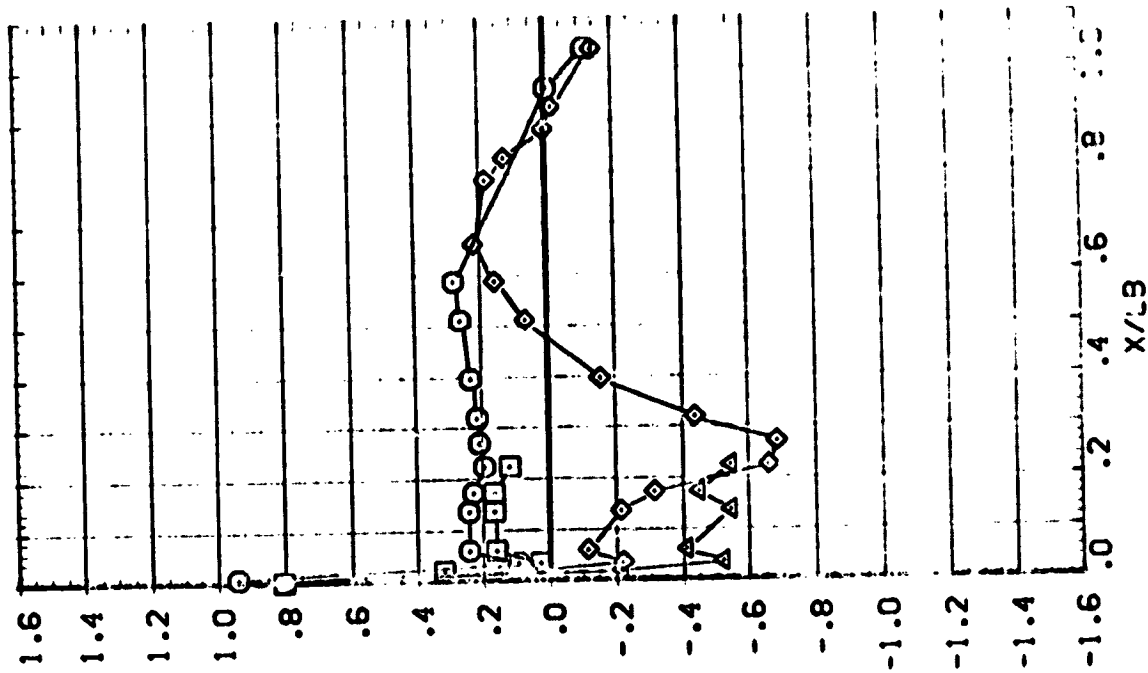
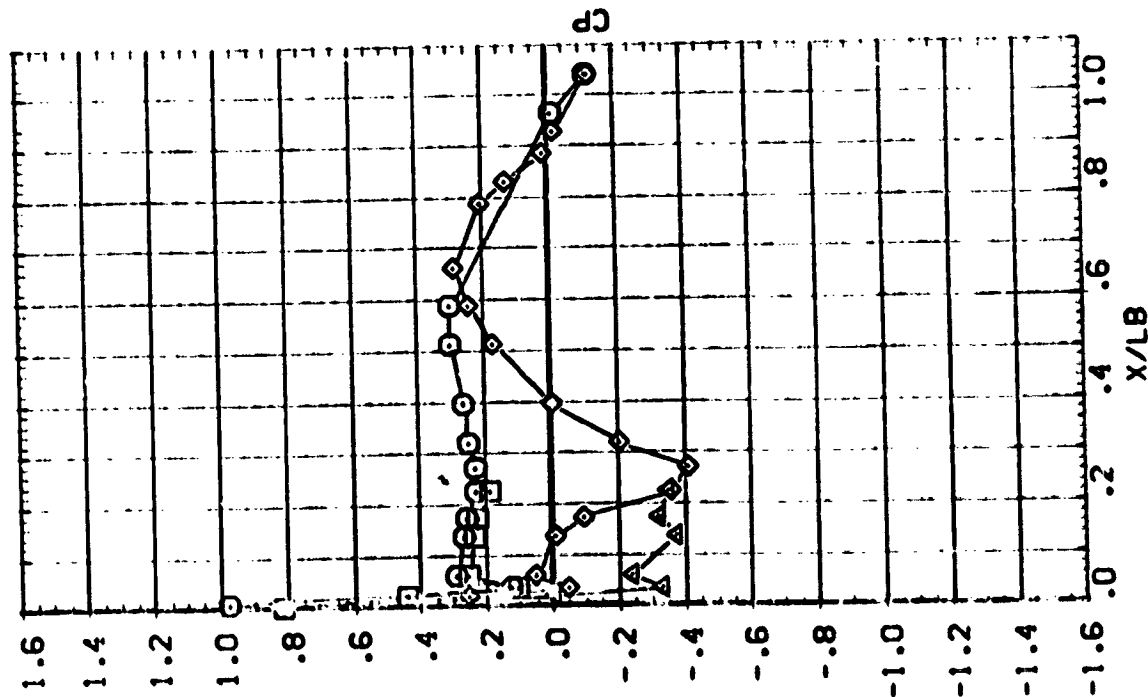
AVES 11-707 CA12 02A

ORBITER FUSELAGE (RBPBC6)

SYMBOL
 ○
 □
 ◇
 △

RE: BETA MACH
 .000 5.210 .597
 20.000
 40.000
 55.000

PARAMETRIC VALUES
 ALPHA 9.000
 ELEVON 9.000
 .000
 .000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (0000000)

ORBITER FUSELAGE

0000000

0000000

0000000

0000000

0000000

0000000

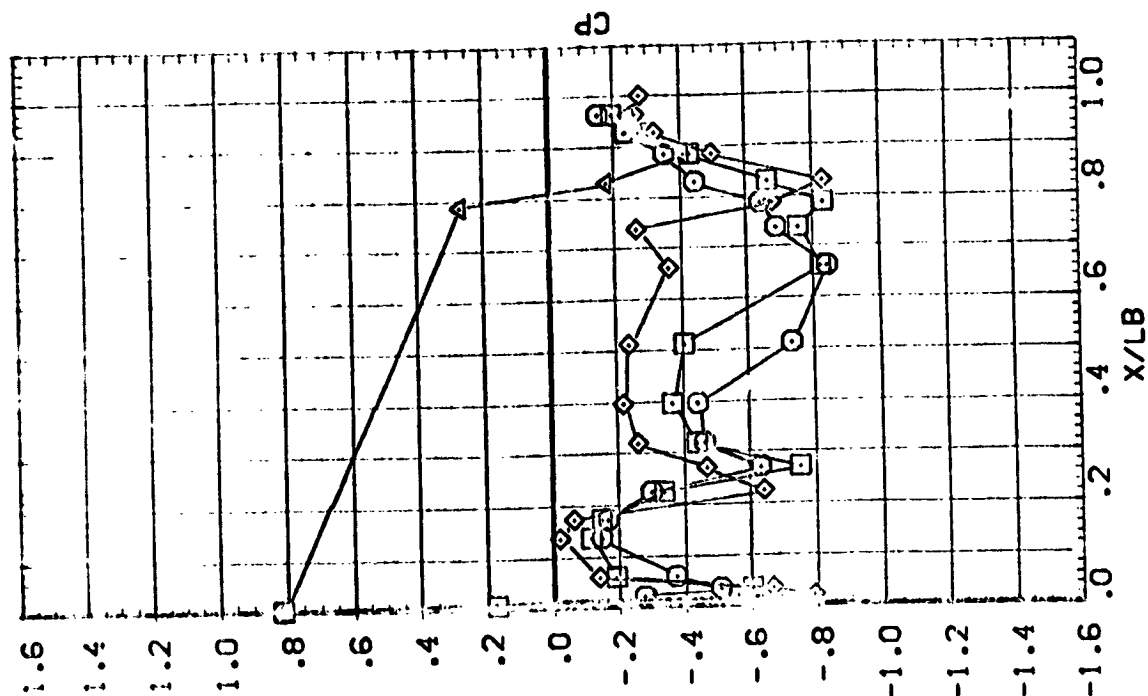
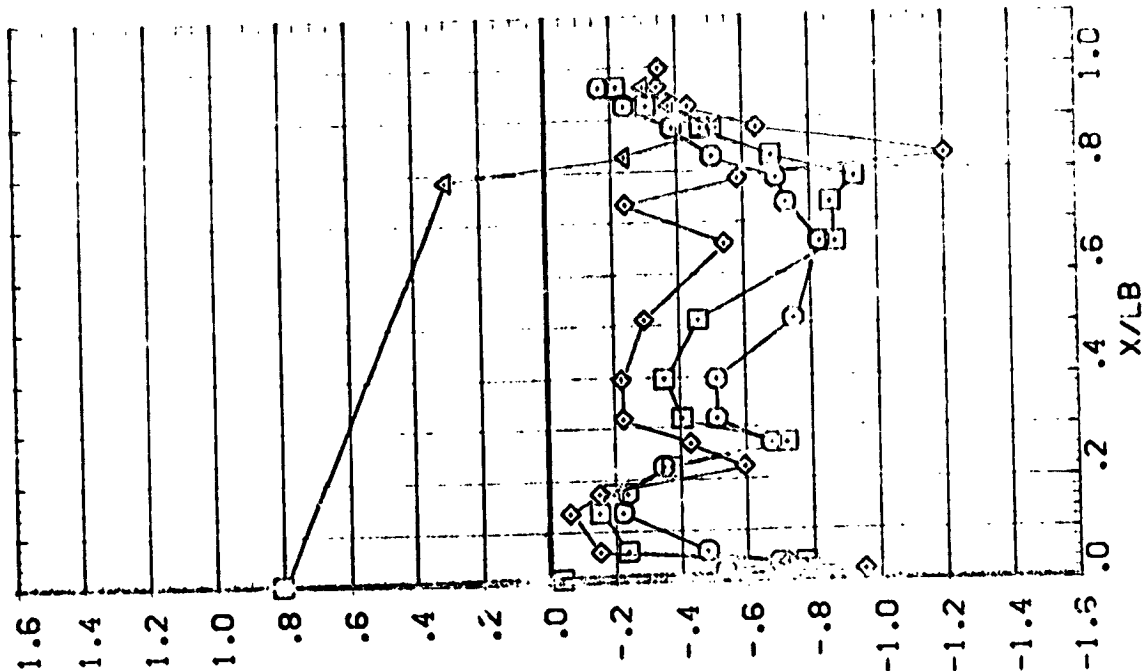
0000000

0000000

0000000

0000000

0000000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ALPHA
ELEVATION

MACH

BETA

PHI

SYMBOL

150.000
165.000
180.000

5.210
10.360

0.997

0.000
0.000
0.000

RUDDER
RUJFLR

70.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

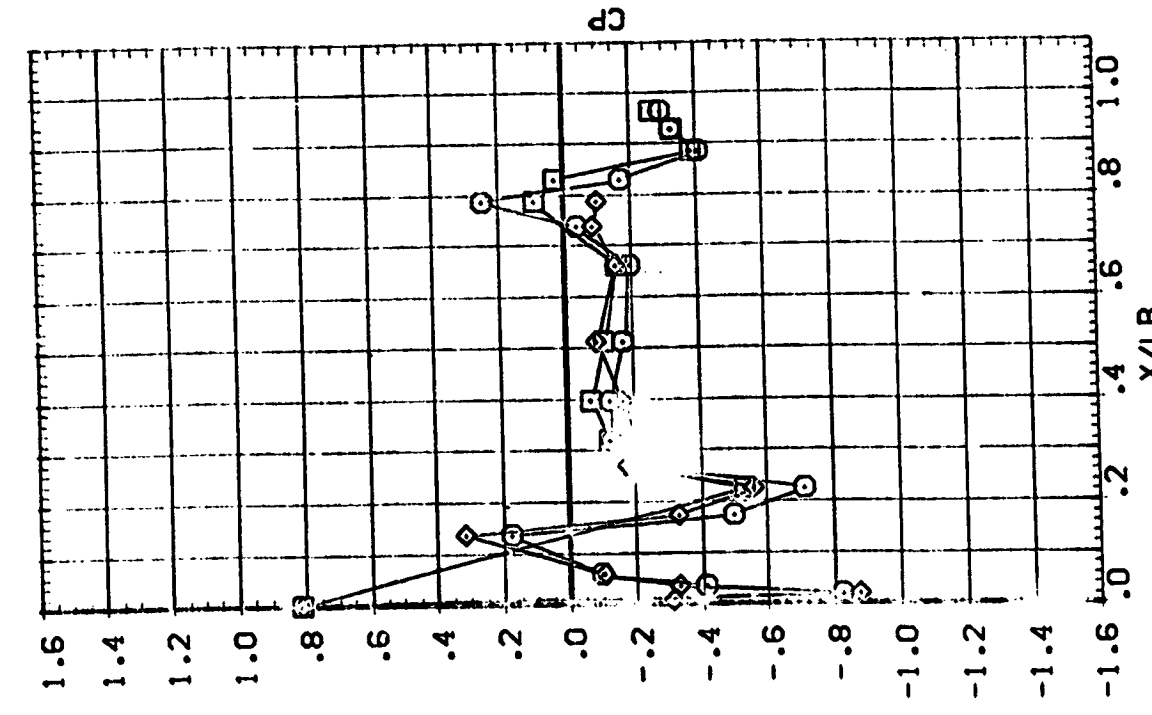
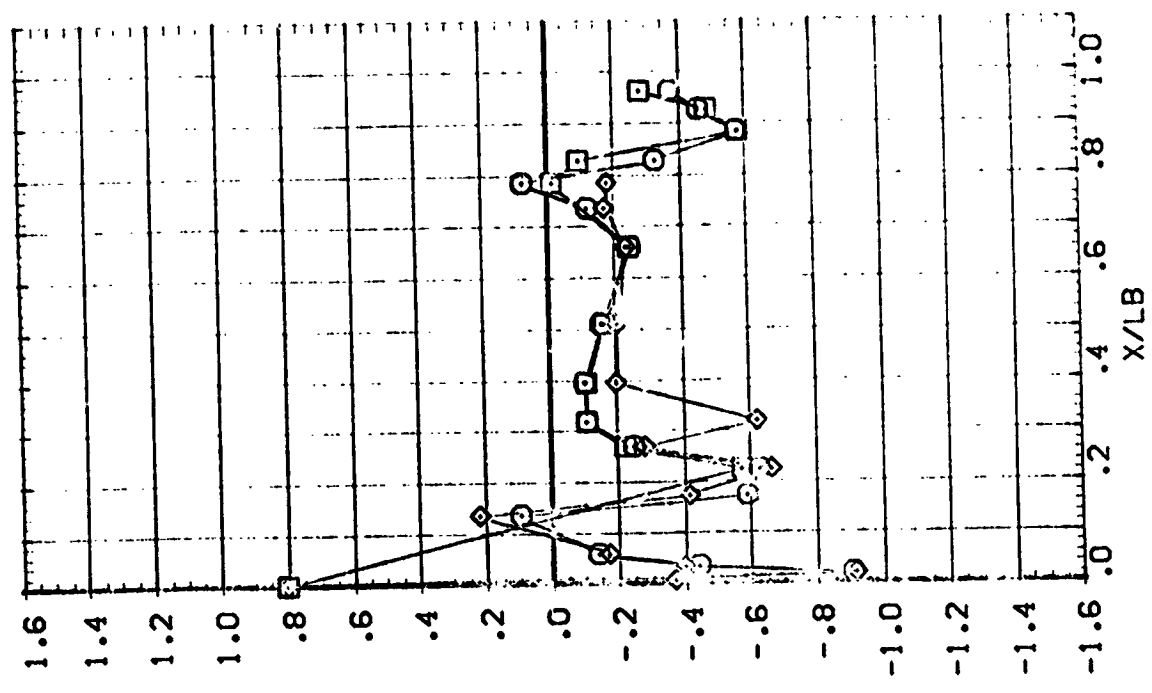
0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000

0.000
0.000
0.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

SVRCD-
0
0
0

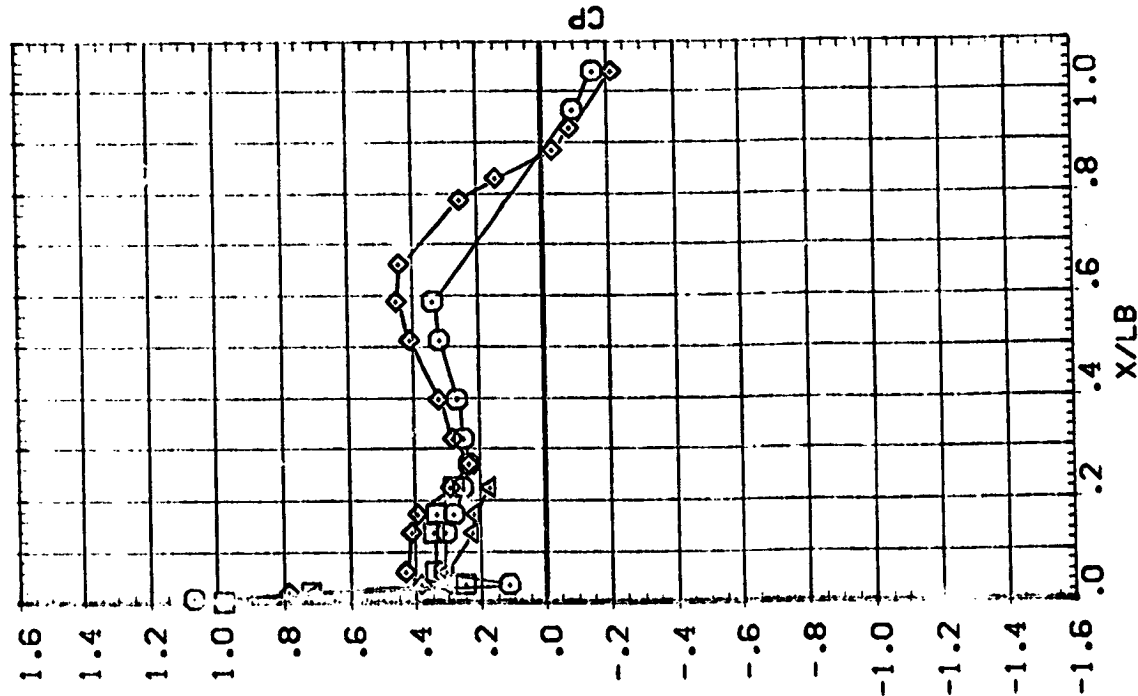
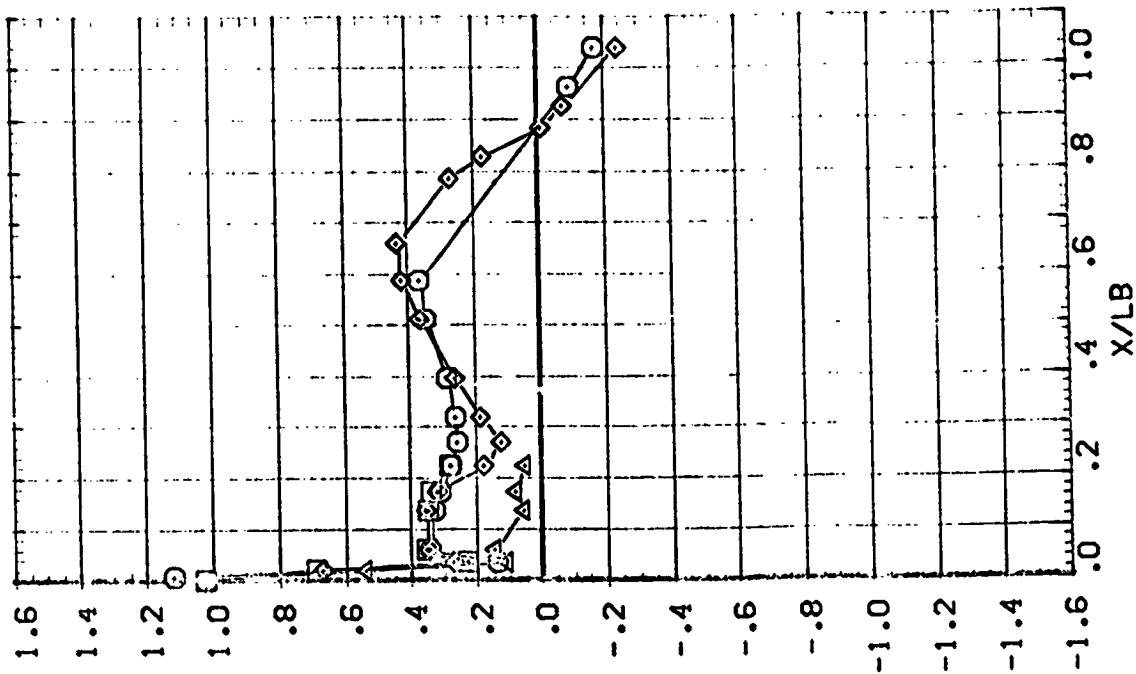
PH: .000
20.000
40.000
55.000

BETA
-10.110
-5.070

MACH
.902

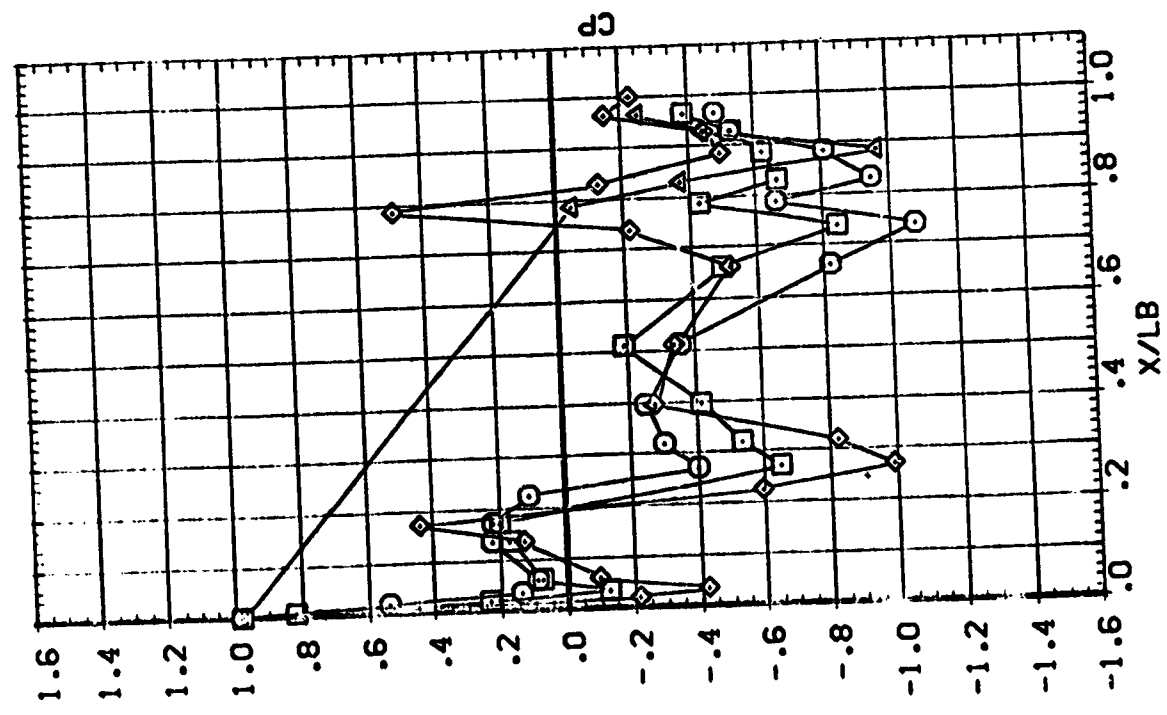
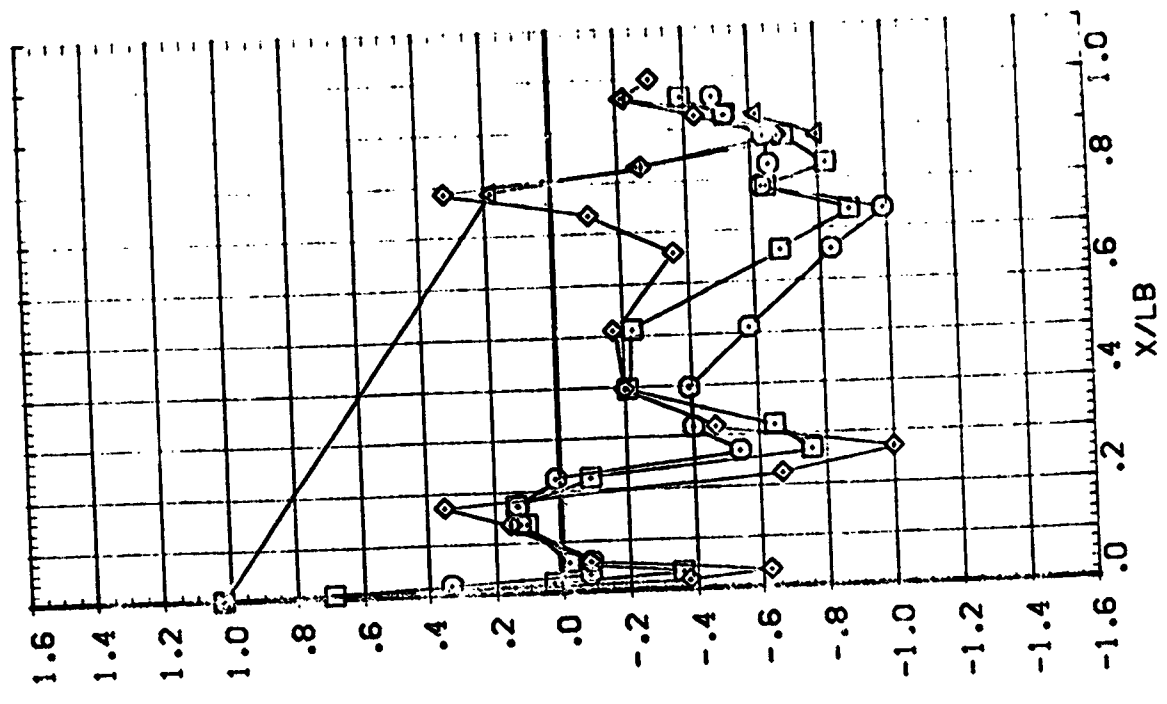
PARAMETRIC VALUES
ALPHA
ELEVON

20.000
1.000
RUDDER
RUDFLR
.000
.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

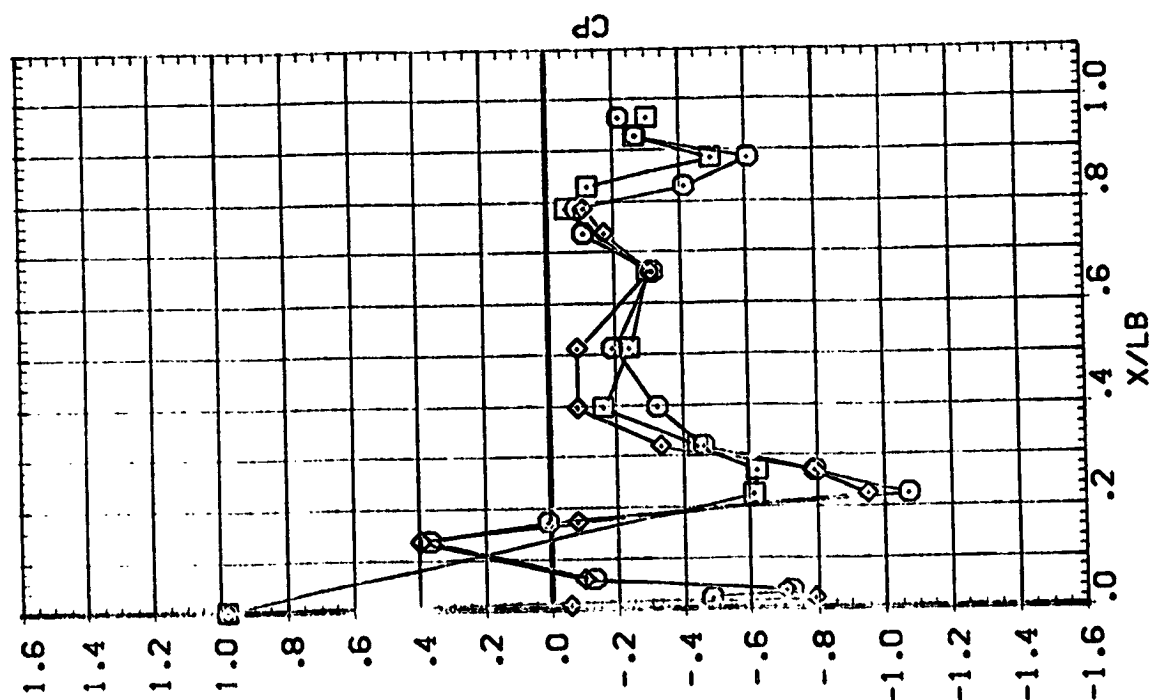
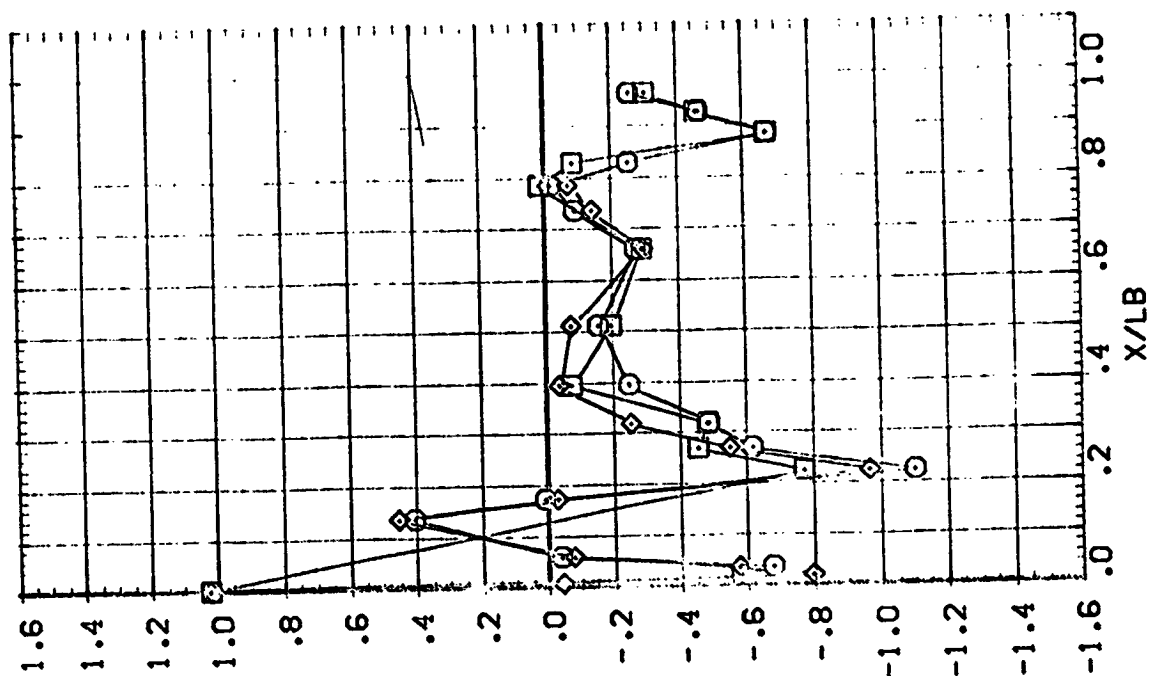
120.000
 135.000
 140.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

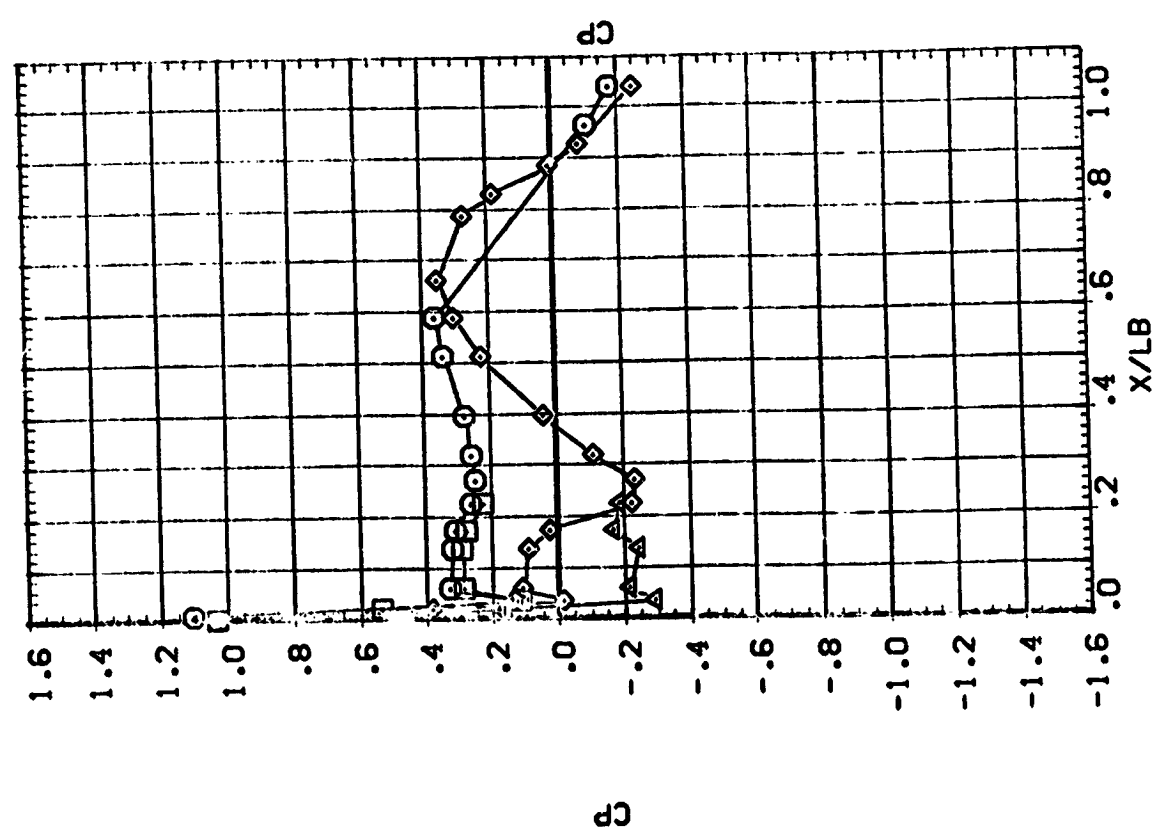
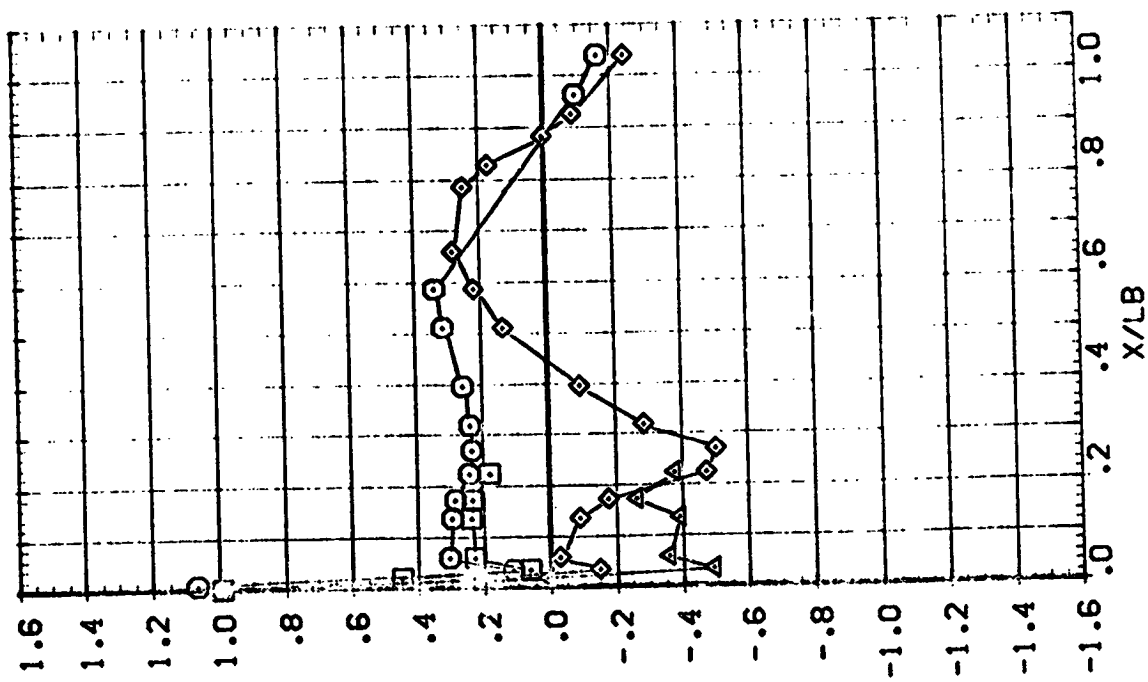
SYNCH
O
I
◇P-1
150.000
165.000
180.000BETA
-10.110
-5.020MACH
.902

PARAMETRIC VALUES

ALPHA
ELEVON
20.000
.000
RUDER
RUDFUP
.000
.000

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ALPHA	PARAMETRIC VALUES	.000
ELEVON	20.000	.000
	RUDER	.000
	RUDFLR	.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

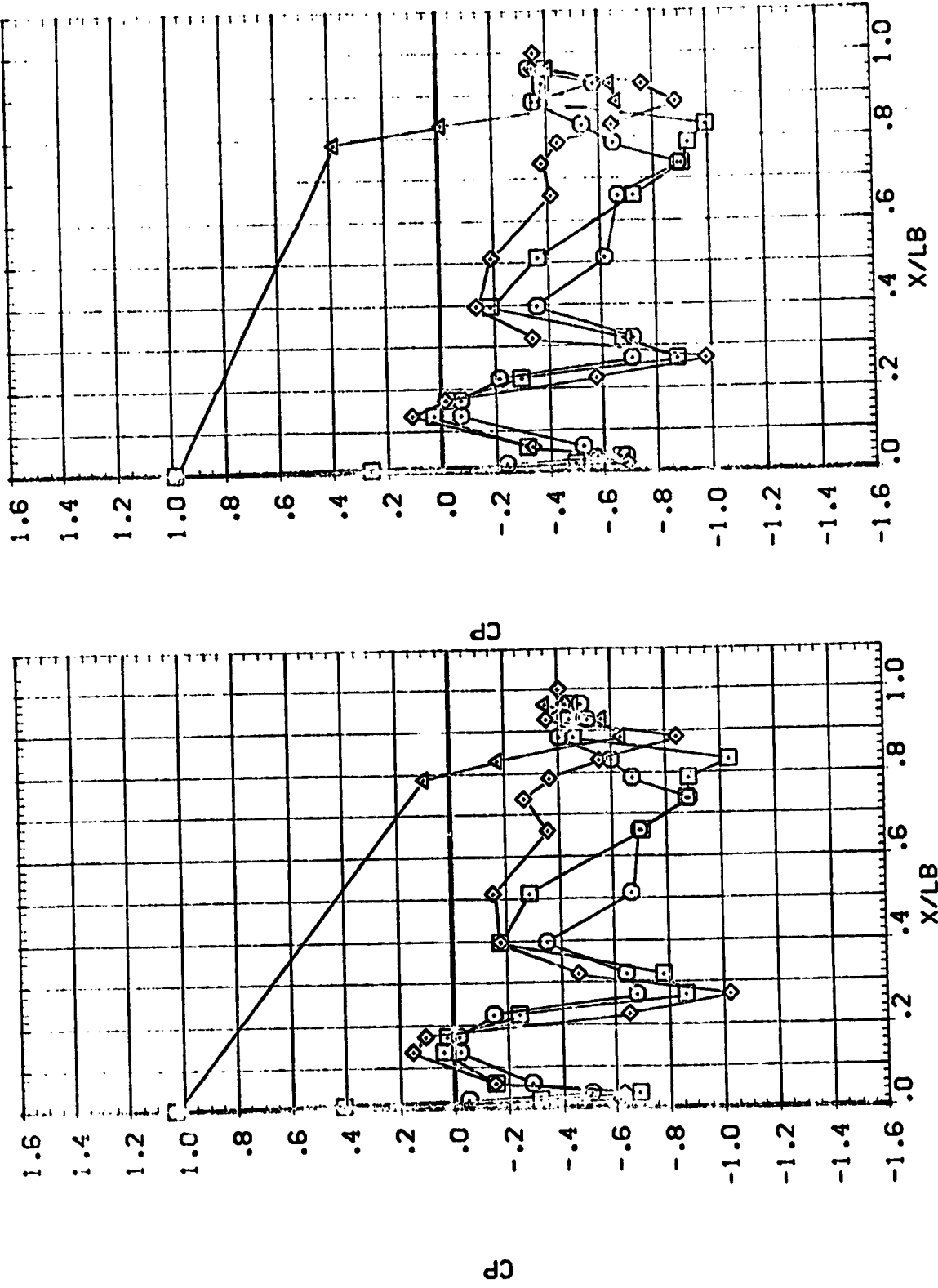
ORBITER FUSELAGE (RBPBC6)

AVES 11-707 CA12 02A

SYMBOL
 ()
 ◇
 △

BETA MACH
 70.000 5.260 .904
 90.000 10.430
 120.000
 135.000

PARAMETRIC VALUES
 20.000 RUDDER .000
 .000 RUDFLP .000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

SYMBOL
○ □ ◇

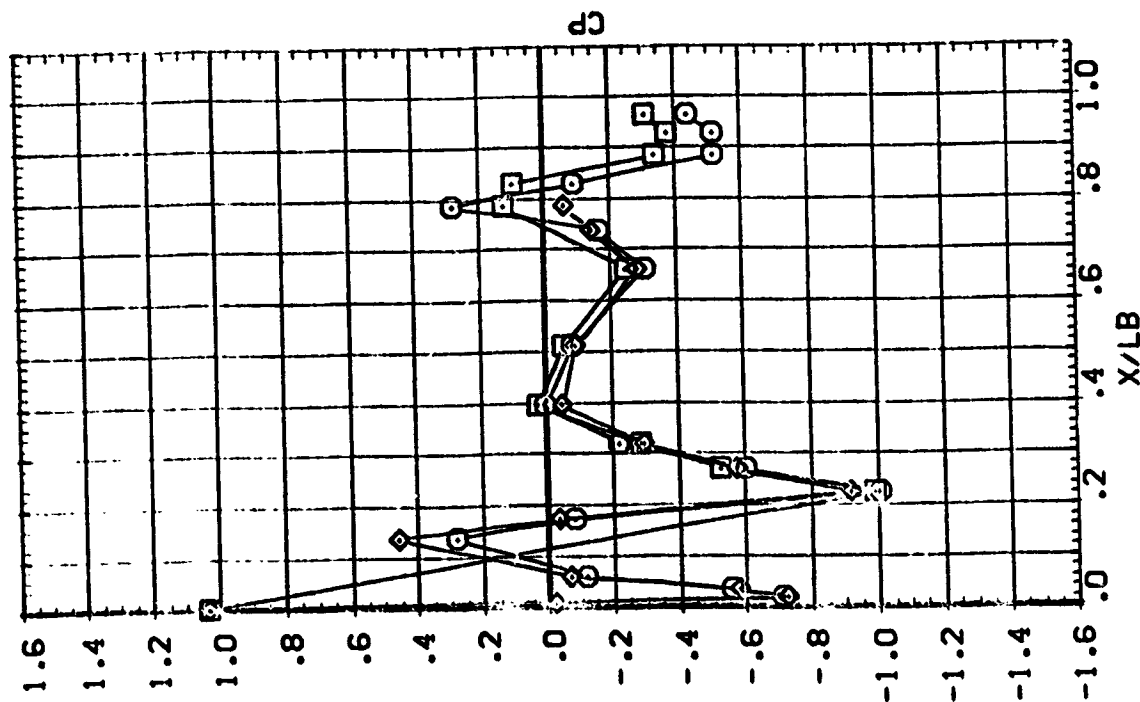
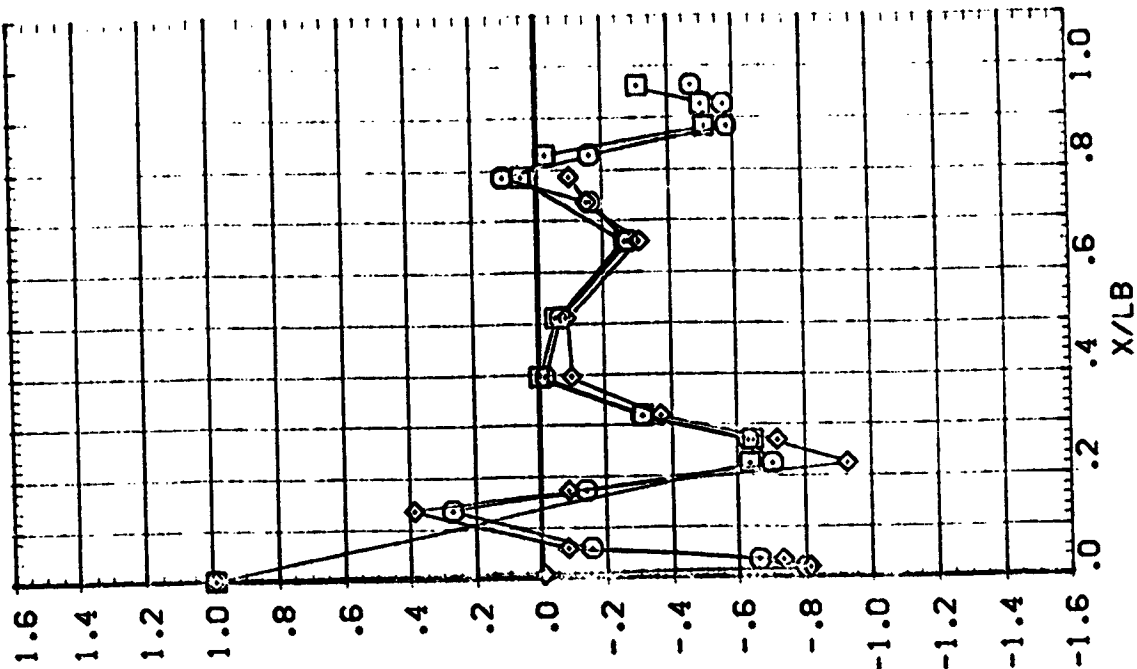
PH: 150.000
165.000
180.000

BETA 5.260
10.430

MACH .904

PARAMETRIC VALUES
ALPHA 20.000
ELEVON .000

RUDER
RUDLER



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBP807)

AVES 11-707 CA12 02A

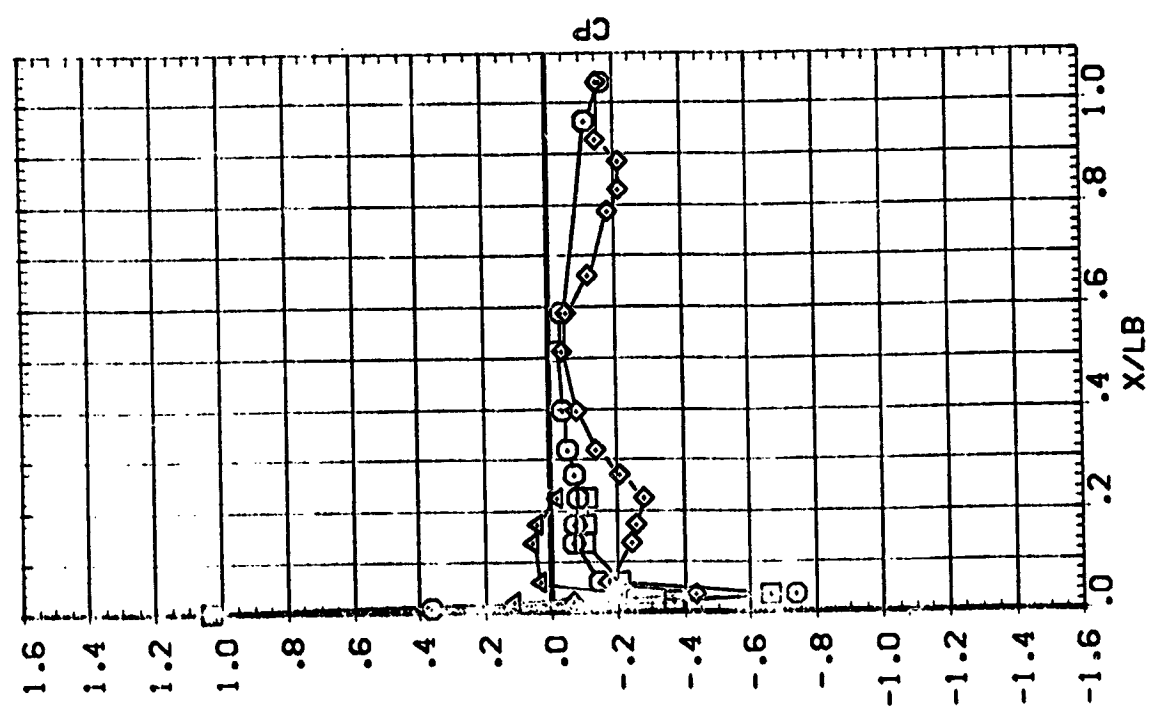
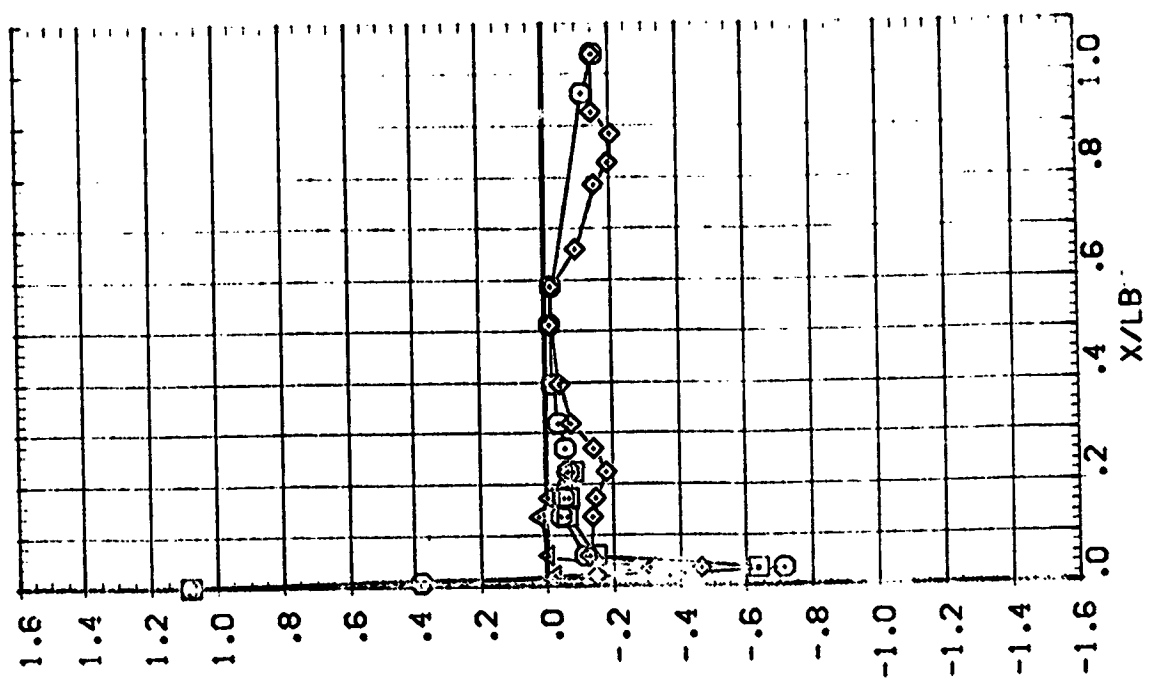
PARAMETRIC VALUES
 .000 .000 .000
 .000 .000 .000
 .000 .000 .000

ALPHA
 ELEVON

BETA
 -7.980
 -3.940

WACH
 .60"

SYNCH
 .000
 20.000
 40.000
 55.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

SYMBOL
 O
 □
 ◇
 △

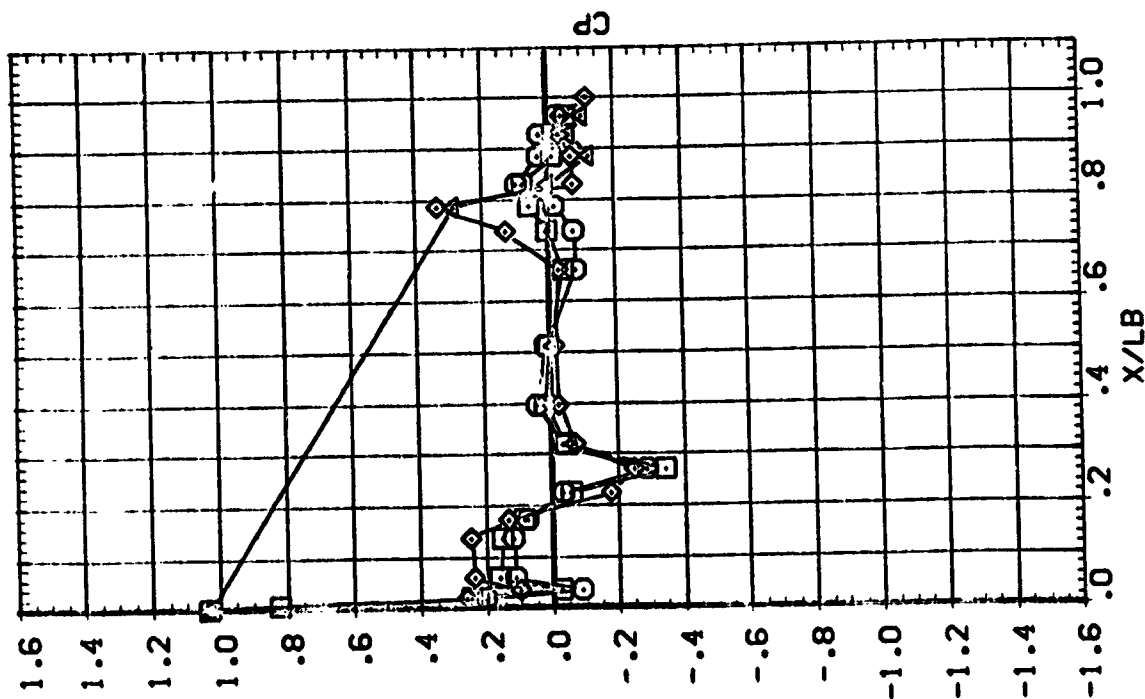
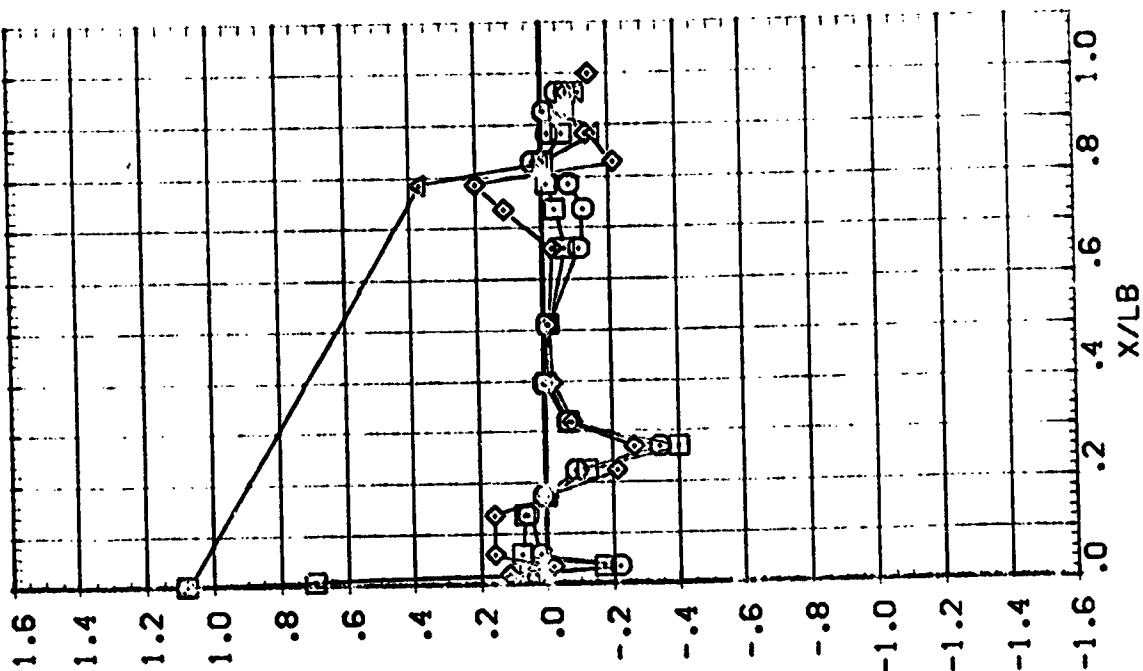
PHI
 70.000
 90.000
 120.000
 135.000

BETA
 -7.980
 -3.940

MACH
 .600

PARAMETRIC VALUES
 .000 RUDER
 .000 RUDFLR
 -10.000
 .000

ALPHA
 ELEVON



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

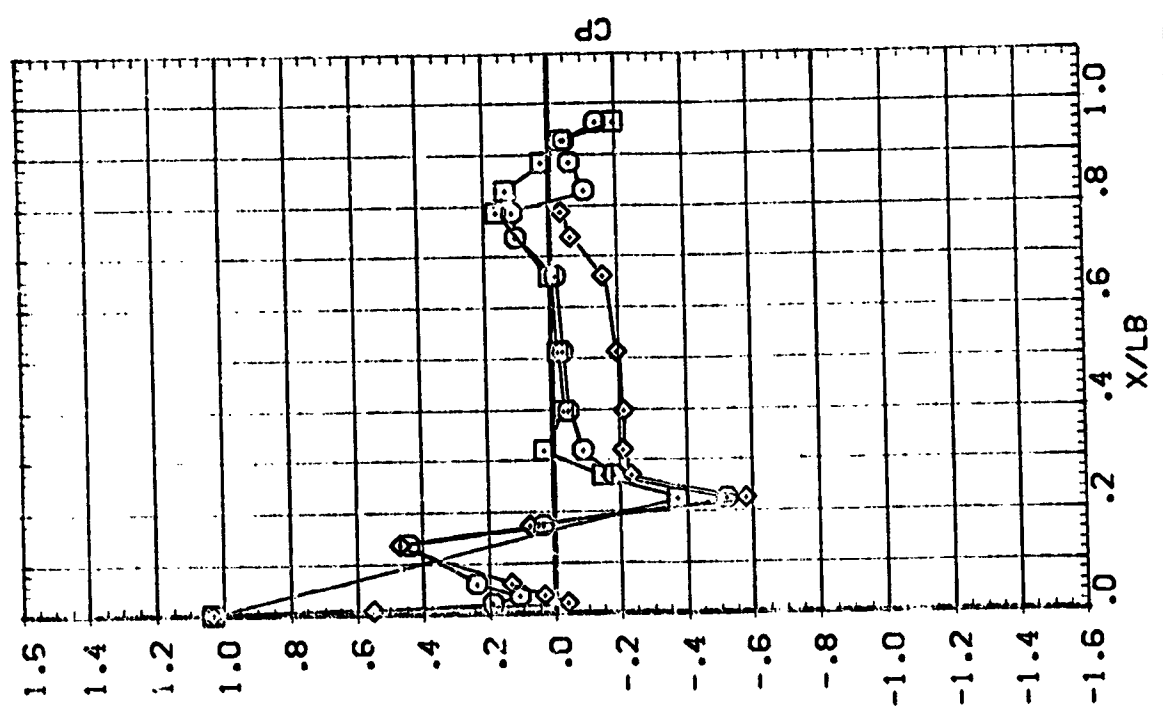
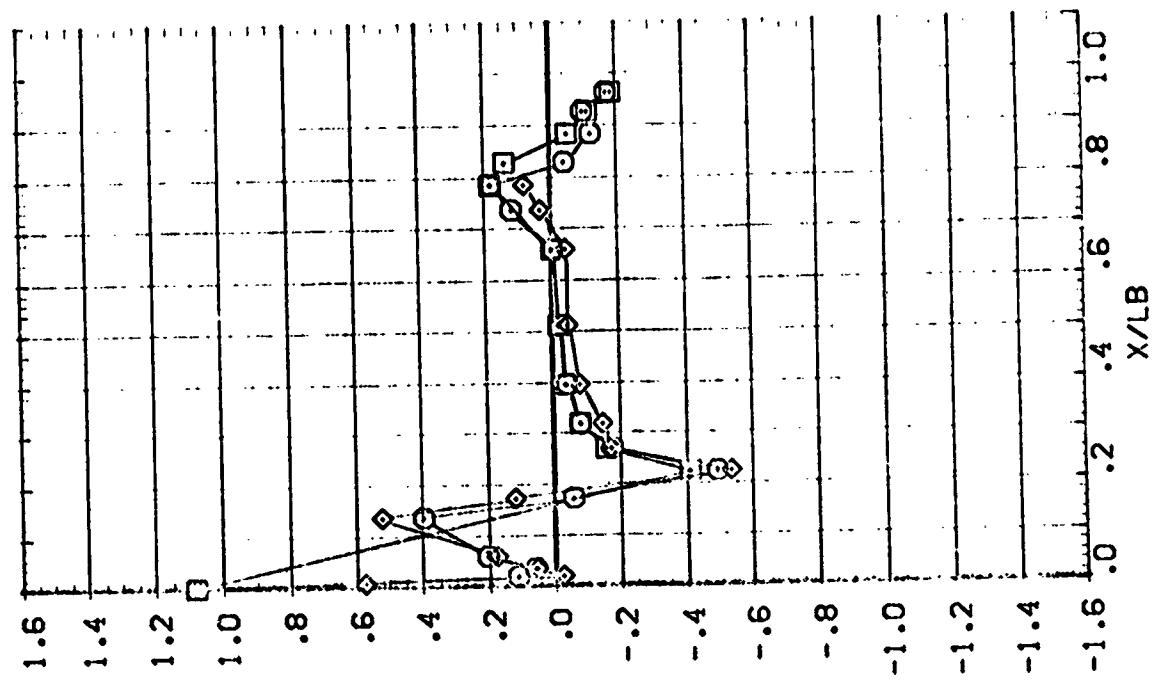
ORBITER FUSELAGE (RBPBC7)

AMES ::-707 CA:2 C2A

PARAMETRIC VALUES
 .000 RUDER -10.000
 .000 RUDER .000

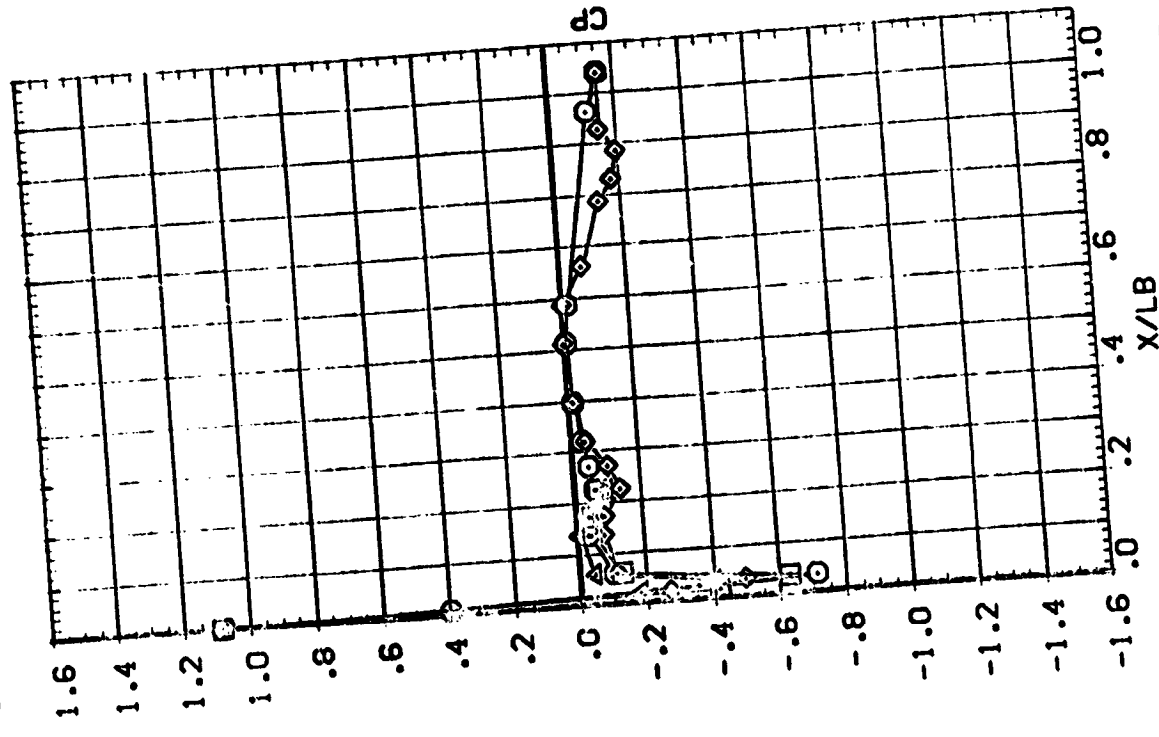
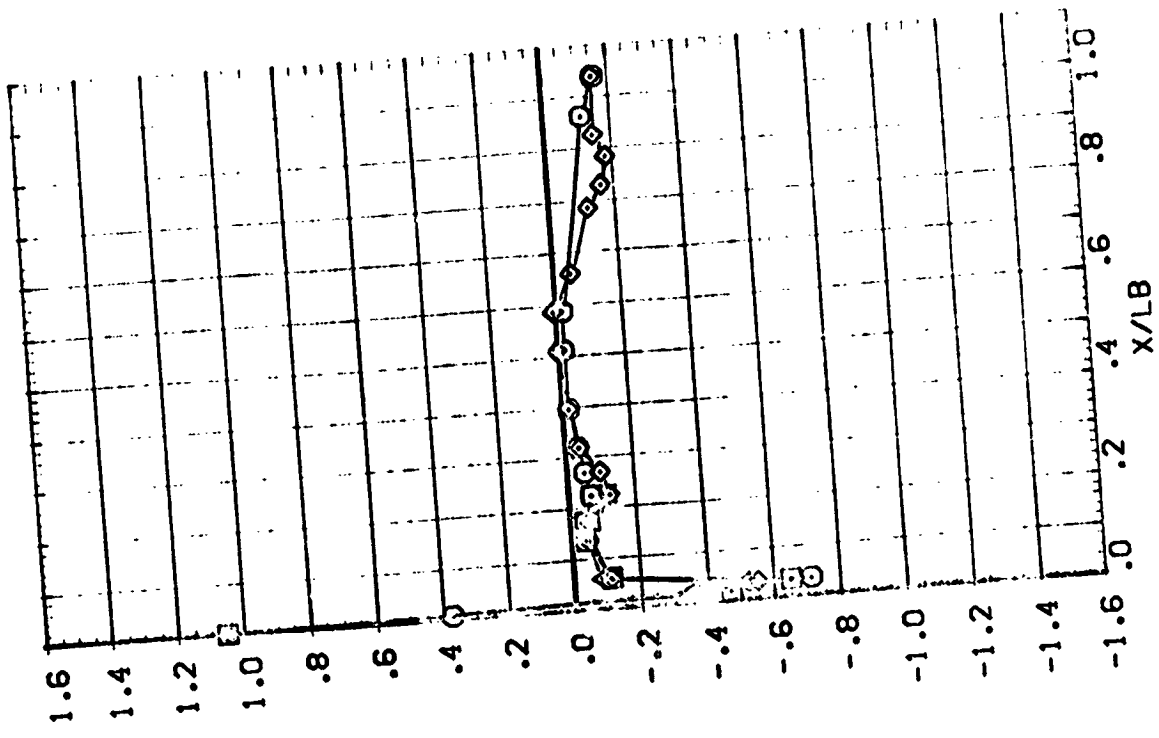
ALPHA
 ELEVON

SVWC-
 D-1: 50.000
 :65.000
 :80.000
 BETA
 -7.980
 -3.940
 WAC-
 .600



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

X/LB
 ELEVON
 .000
 R.0574



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

SVSC-
 01101
 70.000
 40.000
 55.000
 BETA .000
 4.210
 WACH .500

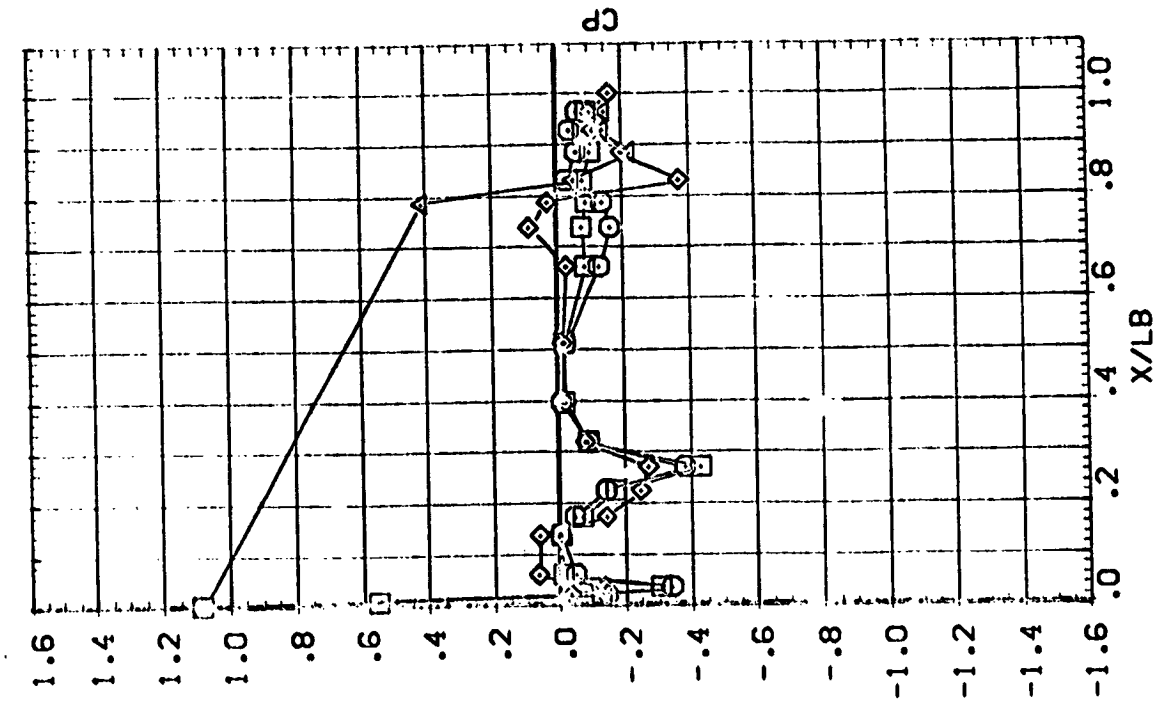
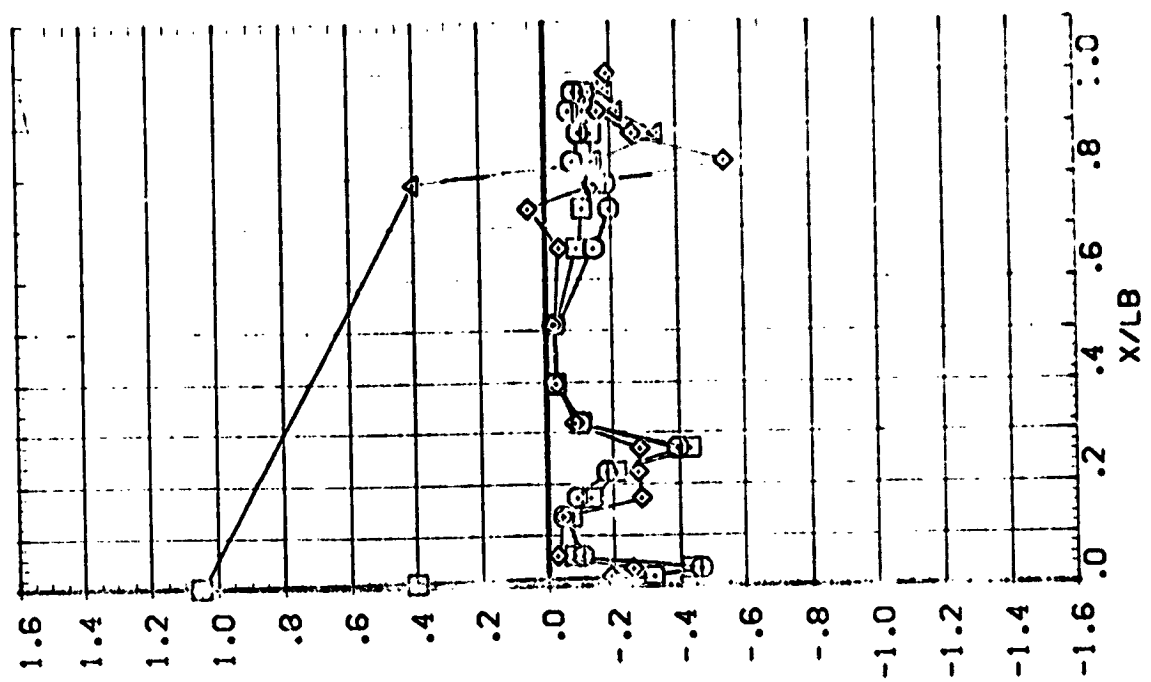
5



AVES 11-707 0A12 02A ORBITER FUSELAGE (RBP8C7)

PARAMETRIC VALUES
ALPHA 0.000
ELEVON 0.000
-10.000

SWR2-
70.000
90.000
120.000
135.000
BETA 0.000
MACH 0.600
4.2:0



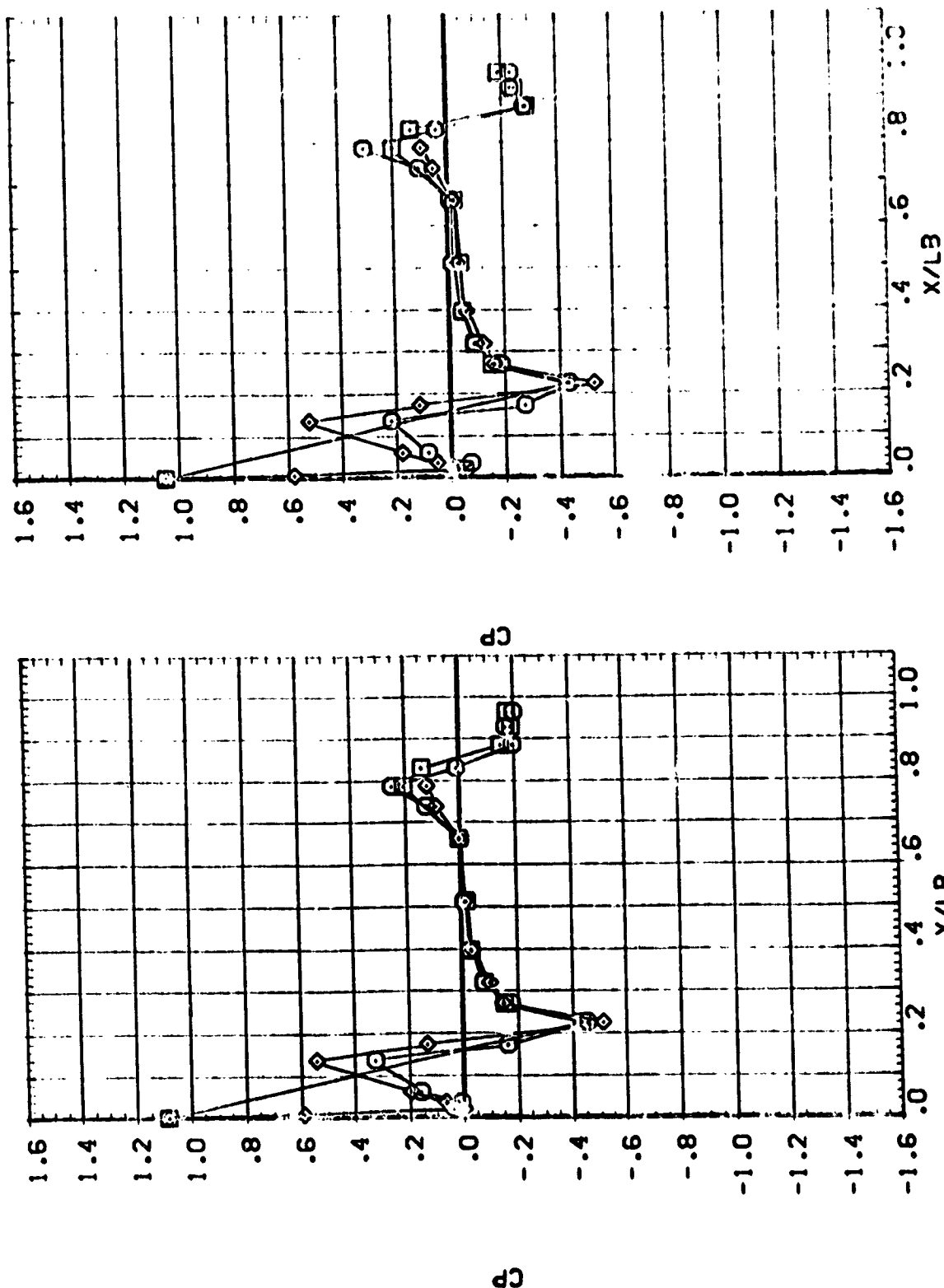
LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

AVES 11-707 CA12 C2A

100

1. 0000
 2. 0000
 3. 0000
 4. 0000

BETA MACH
 .080 .600
 4.2:1

[illegible]

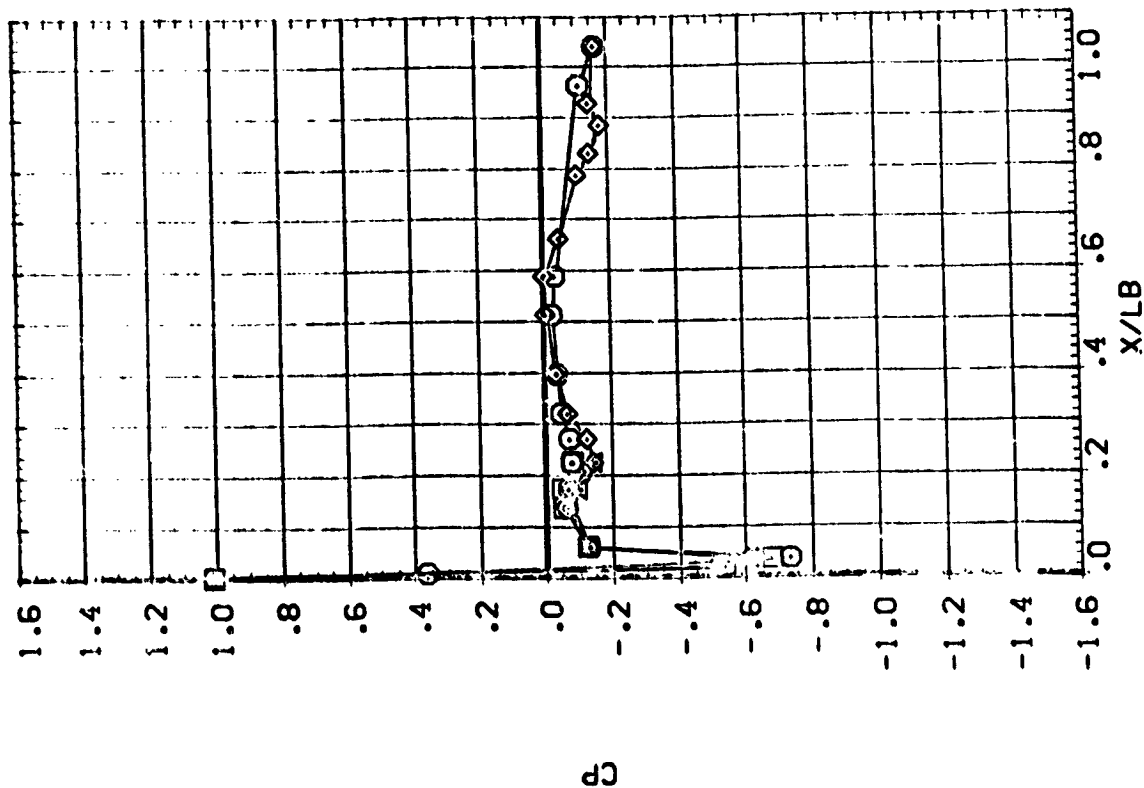
LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

AVES 11-727 CA:2 C2A CRITTER USE AGE 1939307

0000
JUN 98

BEA VAC 455
8-32C 597

ST-VA SIC-PAVERC

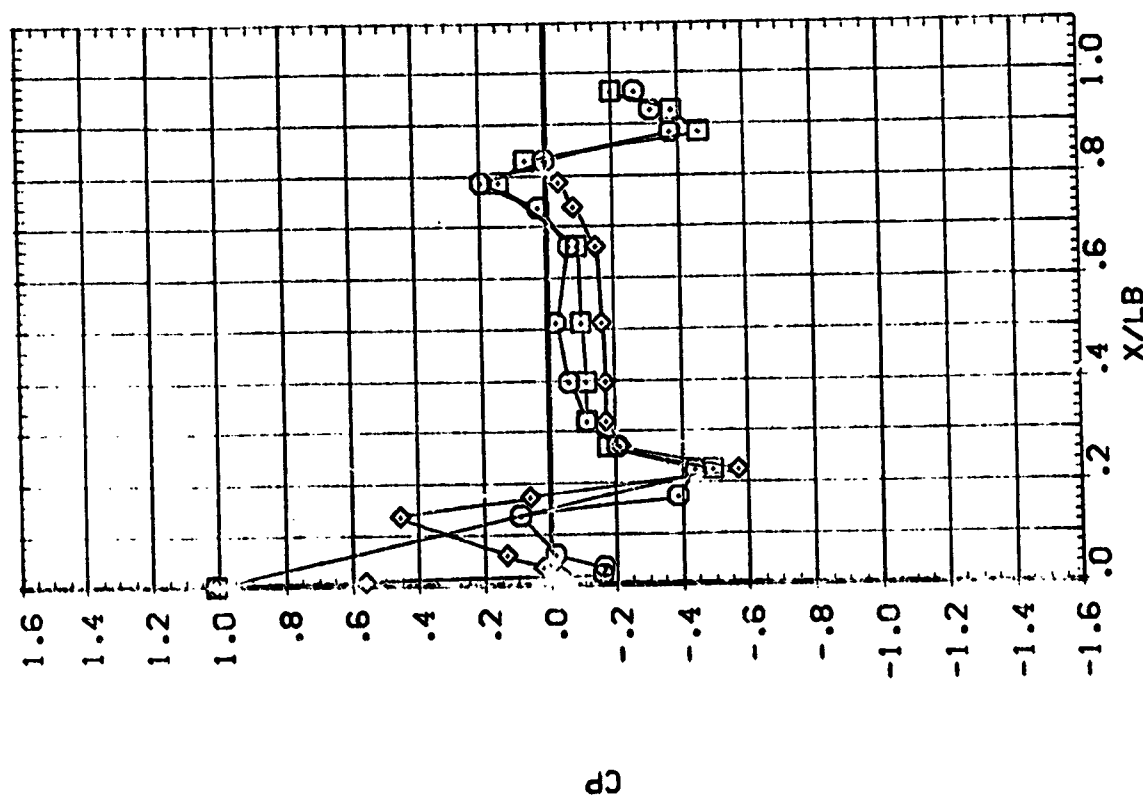


LONGITUDINAL DISTRIBUTION OF ORBITER FUSelage PRESSURES

SVBC-
150.000
65.000
80.000

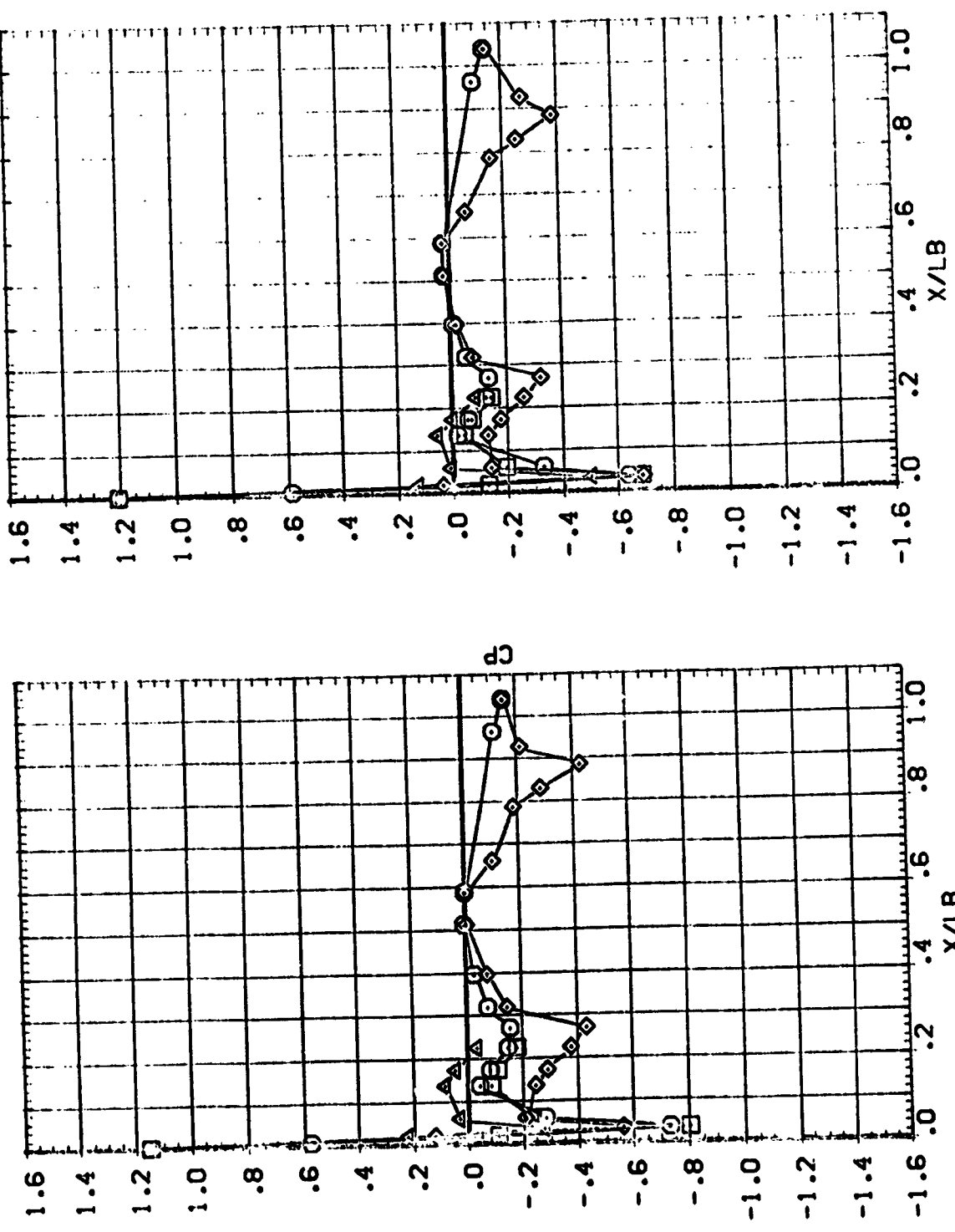
BETA 8.32C
WACH .597

PARAMETRIC VALUES
ALPHA
ELEVON
RUDER
RUDER



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

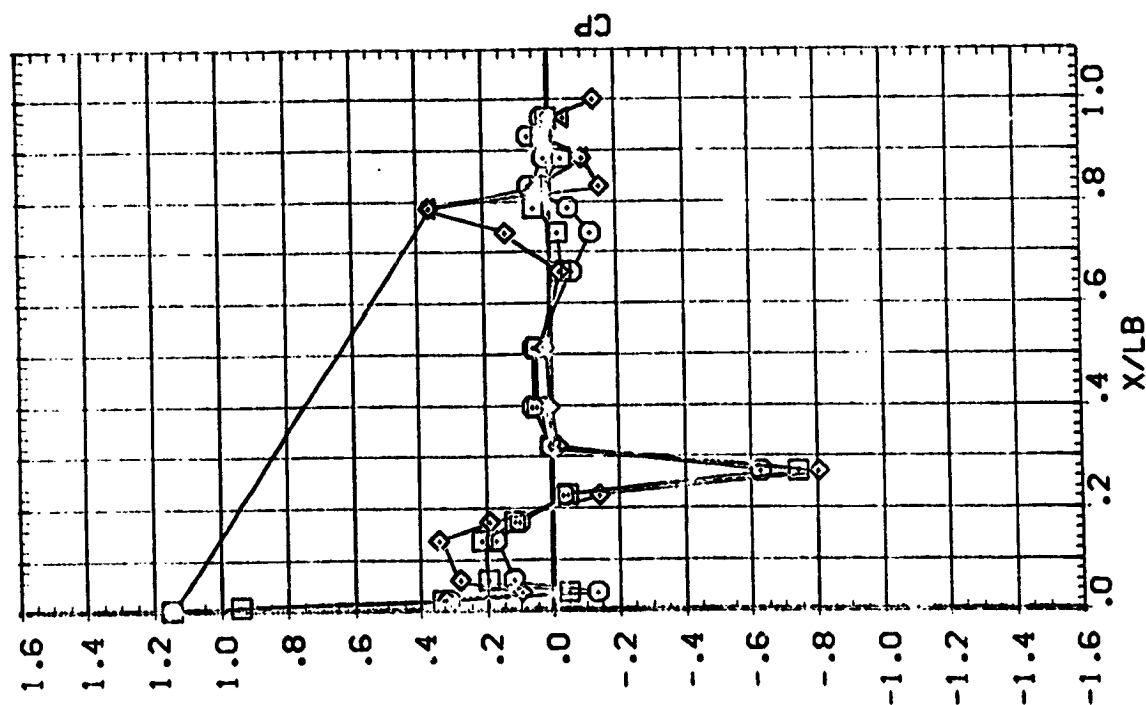
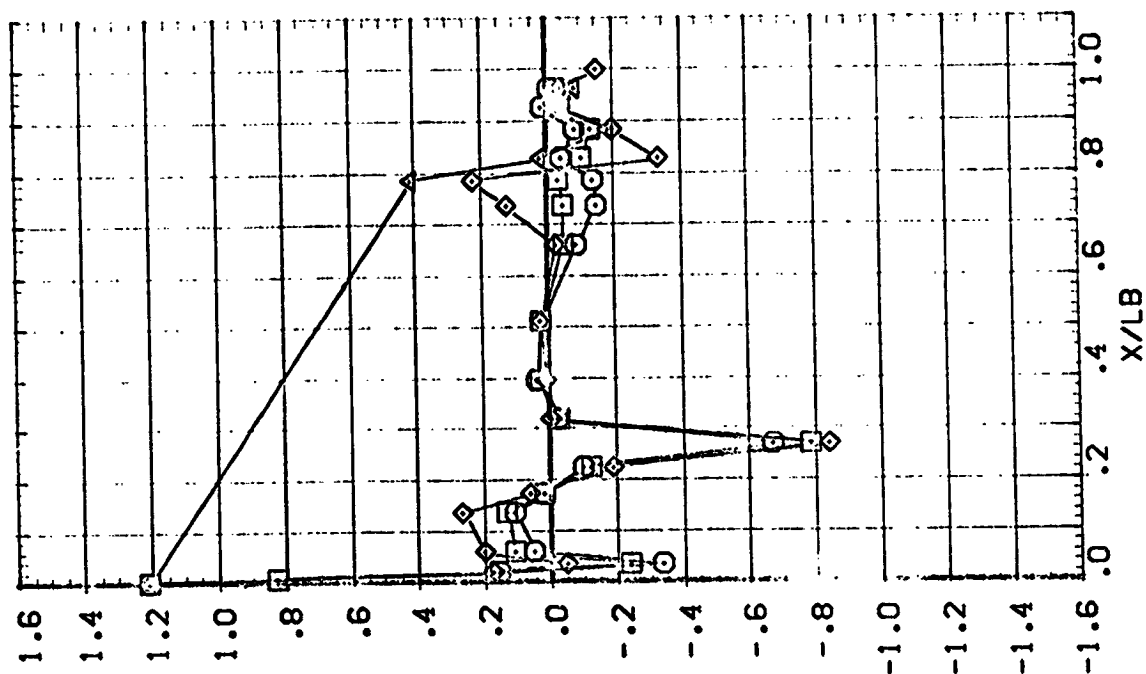
20.000
40.000
55.000
-4.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

PARAMETRIC VALUES
ALPHA .000 RUDDER -10.000
ELEVON .000 RUDDER .000

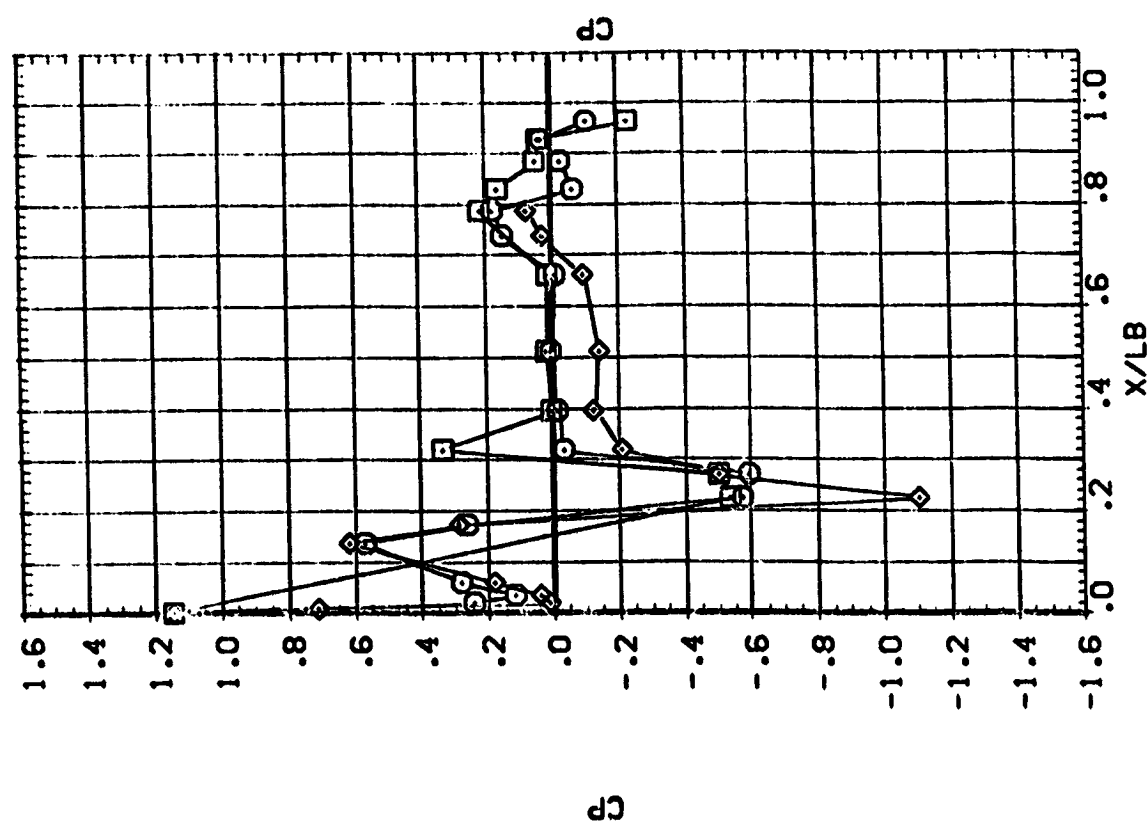
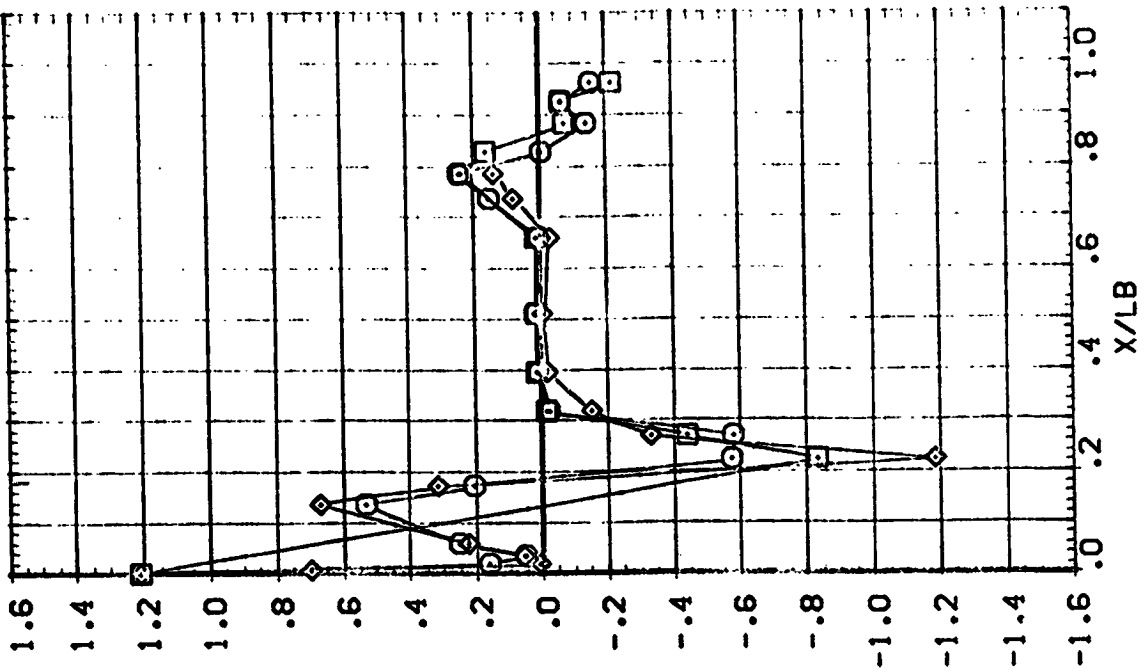
SVWC- PHI BETA MACH
70.000 -8.000 .902
90.000 -4.000
120.000
135.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

PARAMETRIC VALUES
 ALPHA .000 RUDDER -10.000
 ELEVON .000 RUFLR .000

SYMBOL P41 BETA MACH
 O 150.000 -8.090 .902
 . 165.000 -4.000
 ◇ 180.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

AVES 11-707 0A12 02A

ORBITER FUSELAGE (RBP9C7)

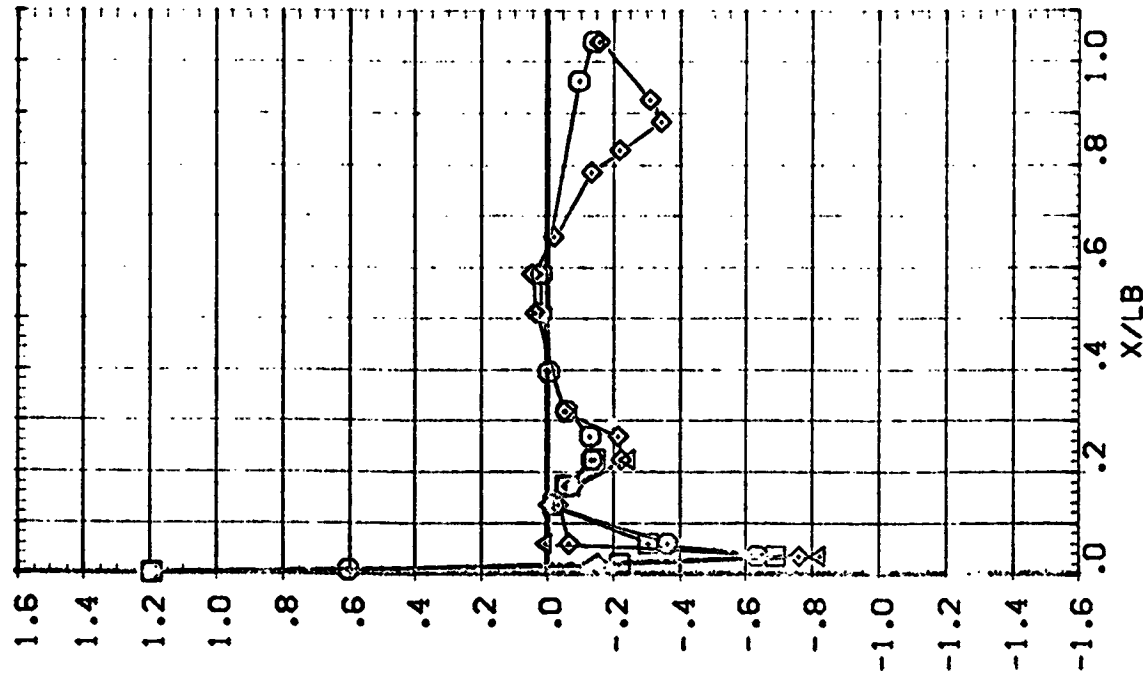
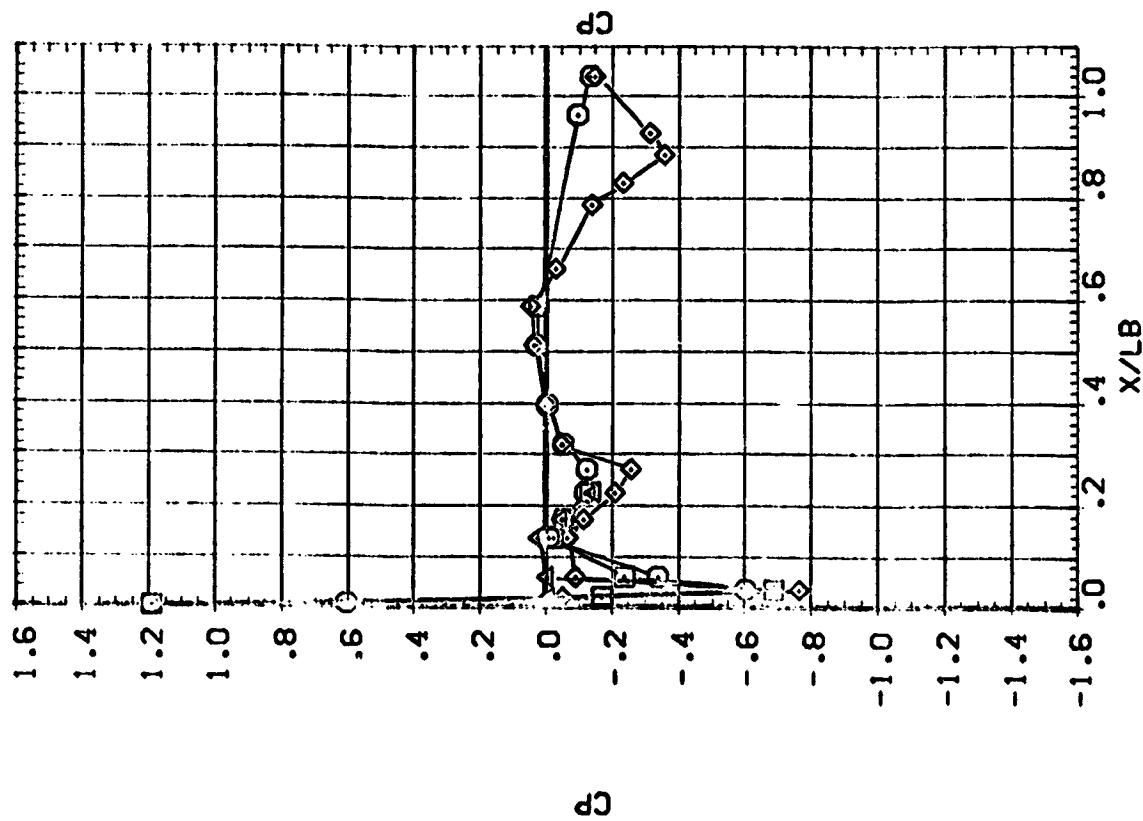
SYNOPSIS

0.000
20.000
40.000
55.000

BETA
.090
4.260

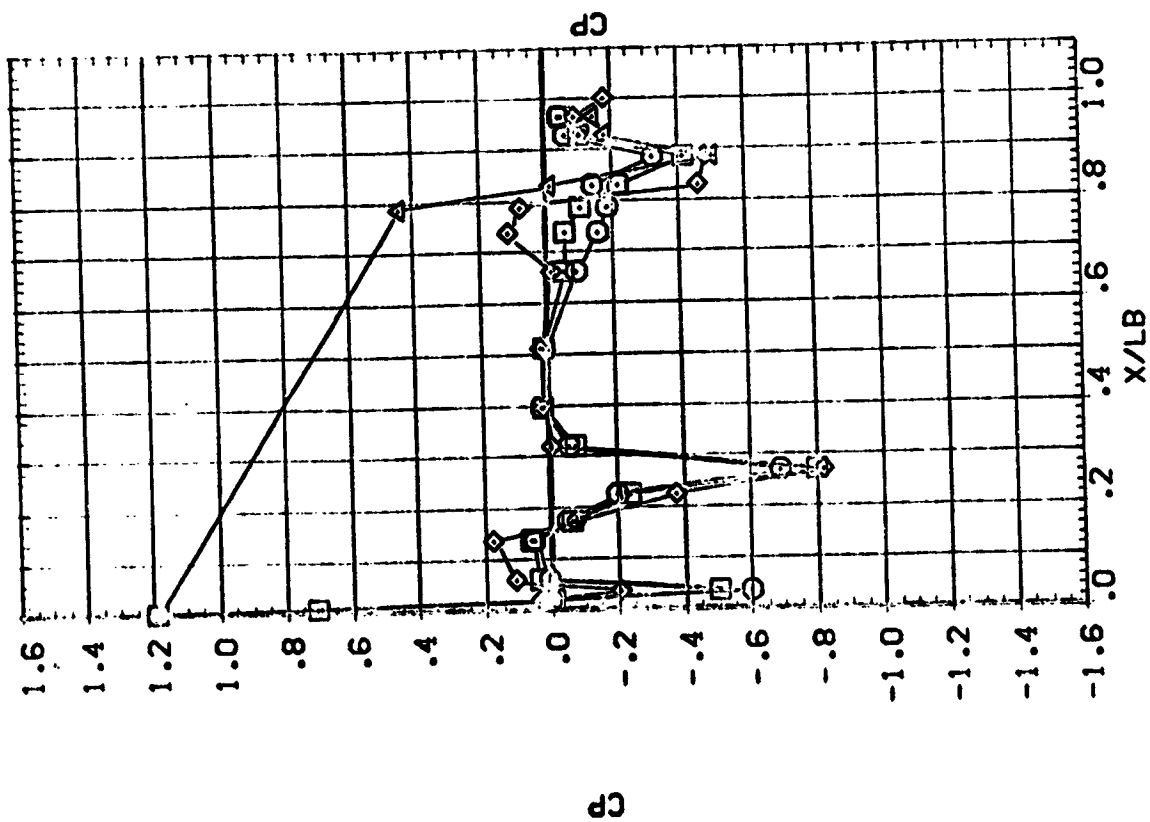
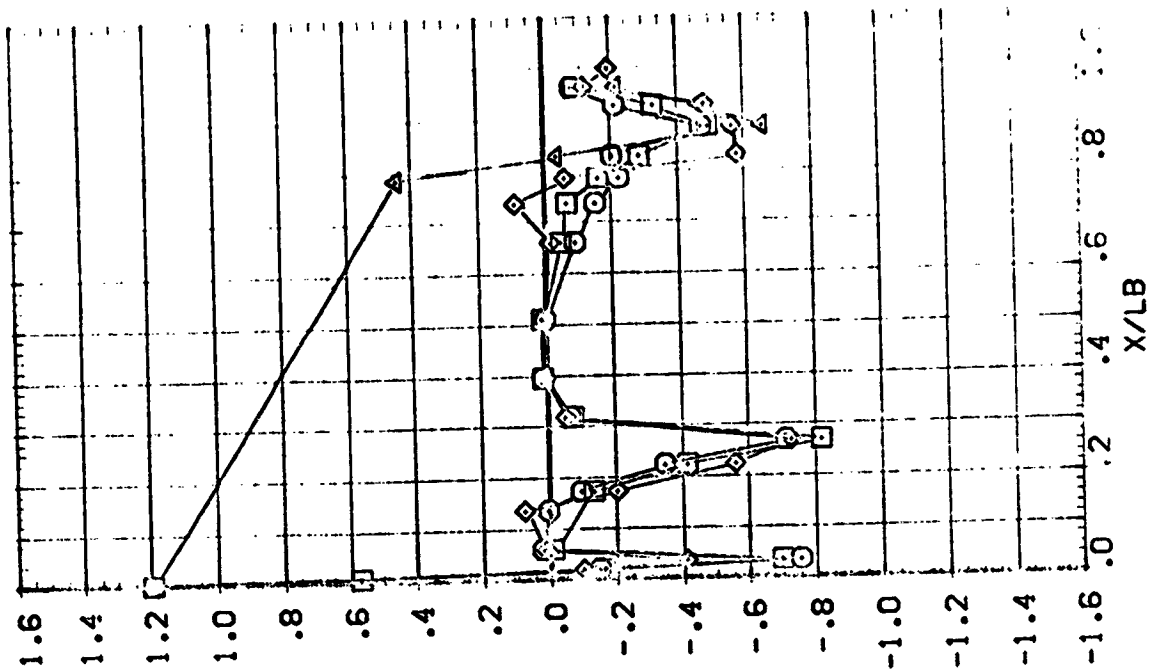
MACH
.903

PARAMETRIC VALUES
ALPHA
ELEVON
.000
.000
RUDDER
RUDLER
-10.000
.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

Symbol	Unit	7-1	7-2	7-3
△	mm	70.000	70.000	70.000
◇	mm	90.000	90.000	90.000
○	mm	170.000	170.000	170.000
○	mm	35.000	35.000	35.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBPB07)

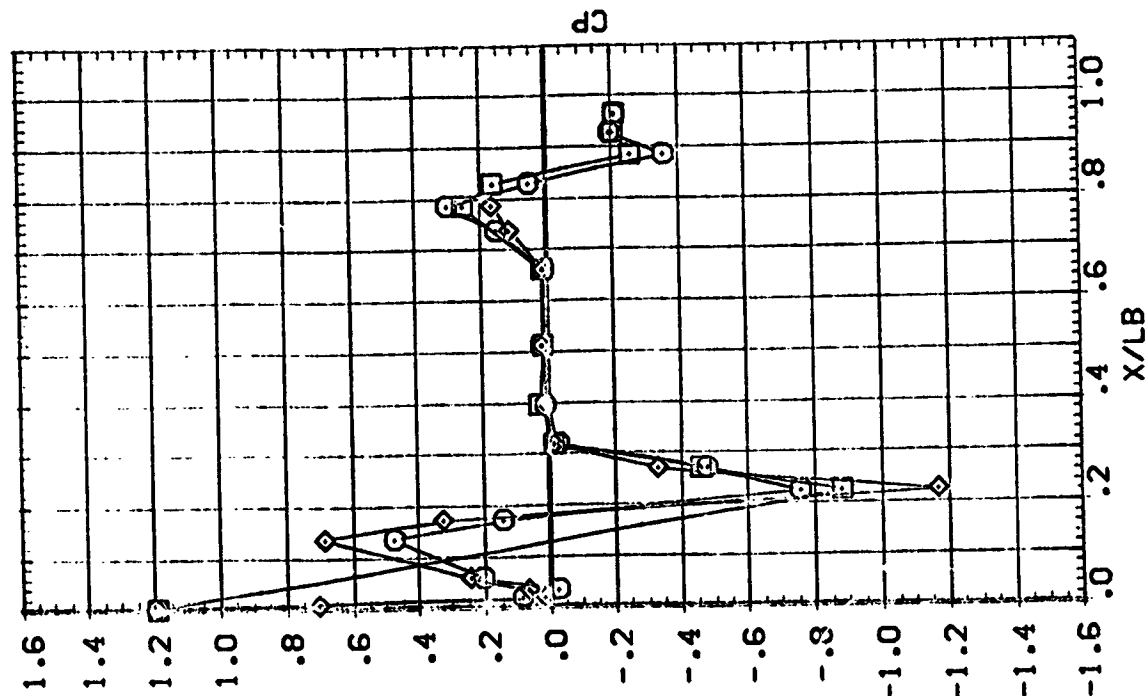
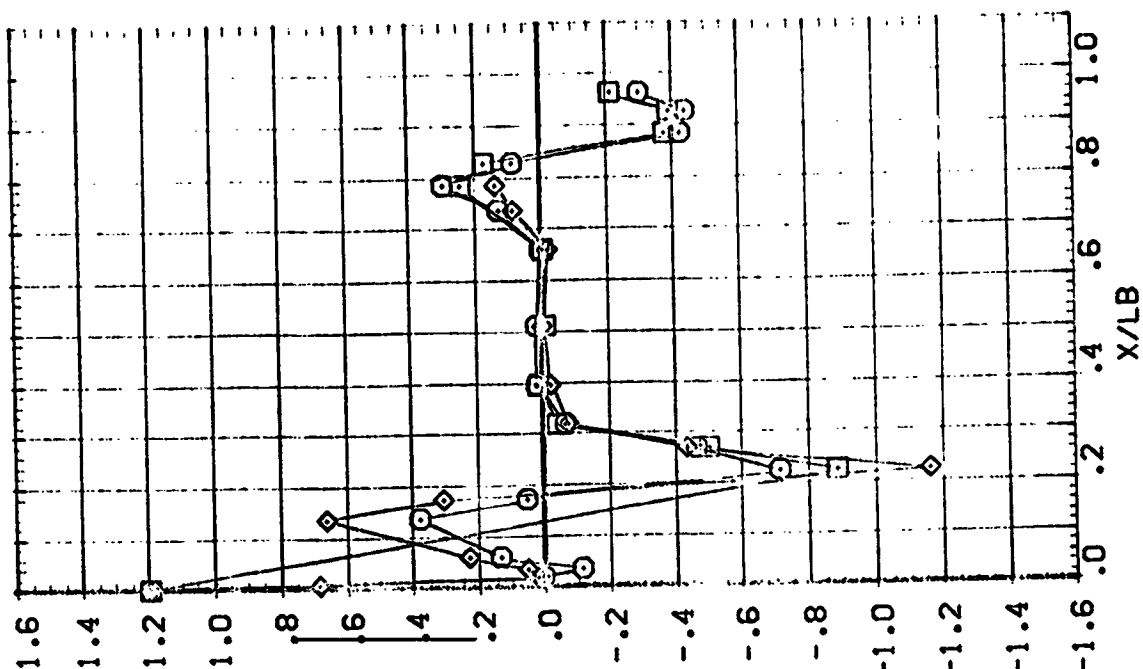
AVES : 1-707 CA12 C2A

SVSC-
 O
 □
 ◇

PHI
 150.000
 165.000
 180.000

BETA MACH
 .030 .903
 4.260

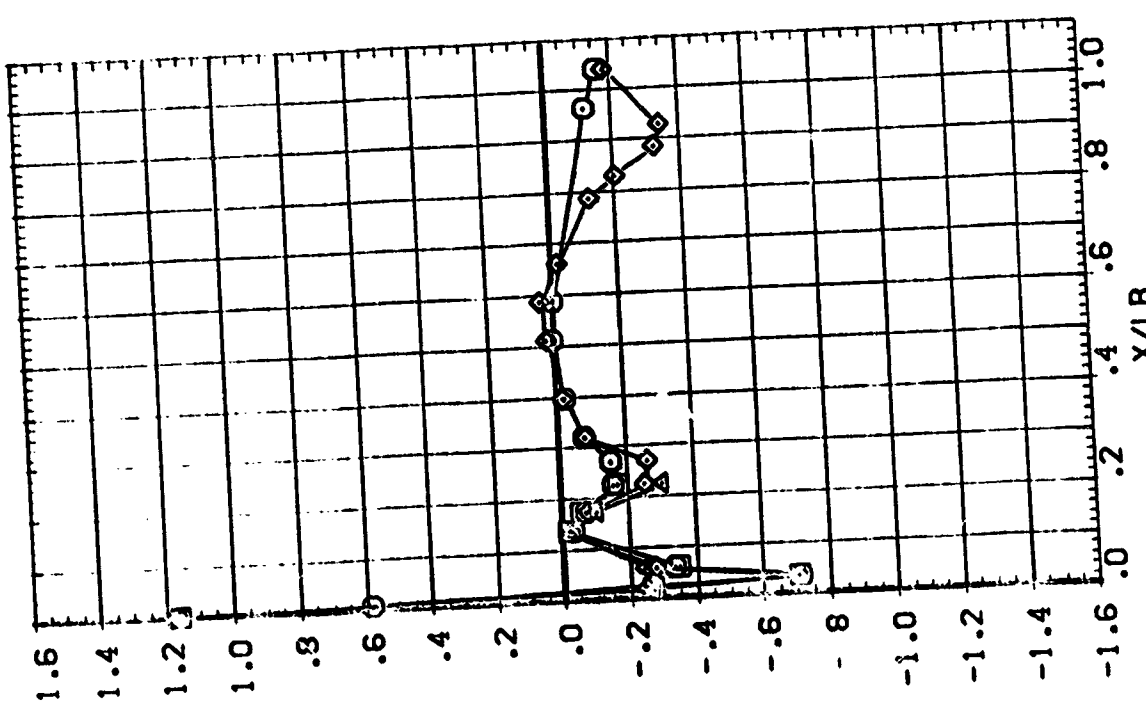
PARAMETRIC VALUES
 .000 RUDER -10.000
 .000 RUDEL .000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

RL(III)
 ELEVON
 .0000
 9.0000

SWAGL
 PH: .000
 20.000
 40.000
 55.000
 SE-A 8.44C
 W/L 4 .905



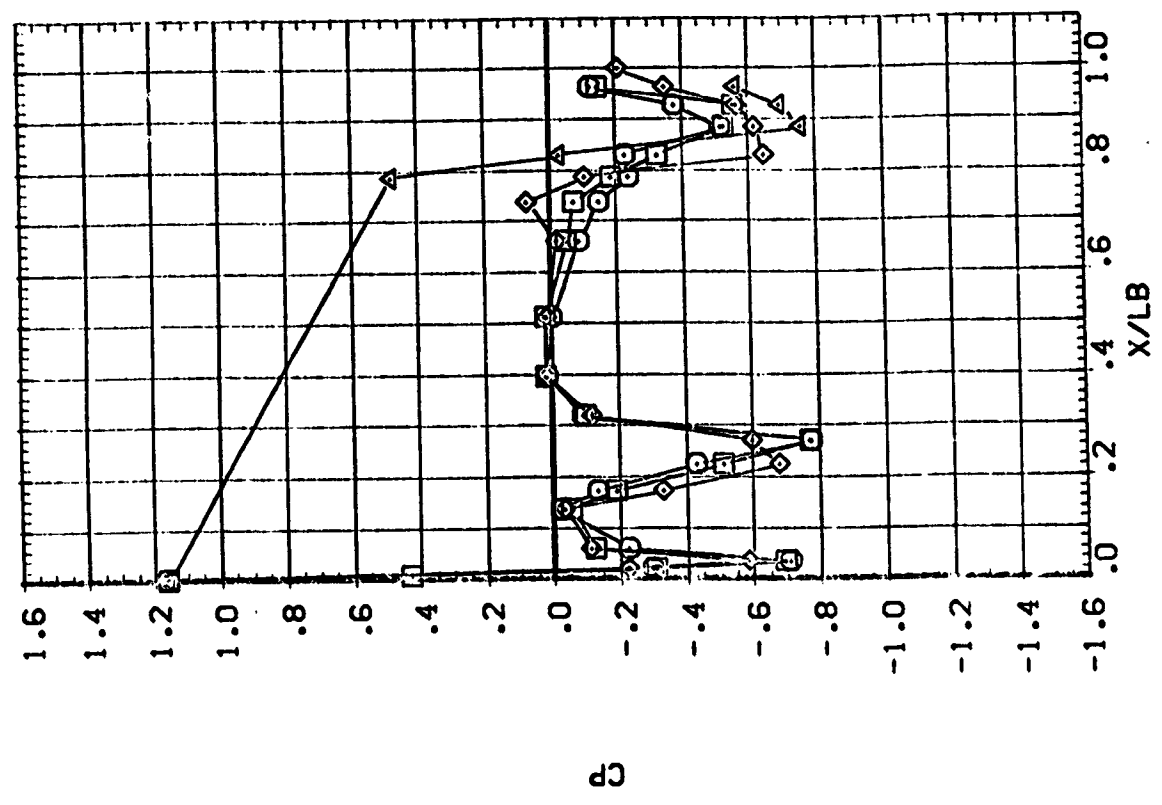
LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES



AMES 11-707 3A12 02A ORBITER FUSELAGE (R3P3C7)

PARAMETRIC VALUES
ALPHA .000
ELEV .000
RUDDER .000
RUFLR .000
-10.000

SVASC- PH1 BETA VACH
70.000 8.440 .925
90.000
120.000
135.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

SYMBOL
 ○ □ ◇

PHI
 150.000
 165.000
 180.000

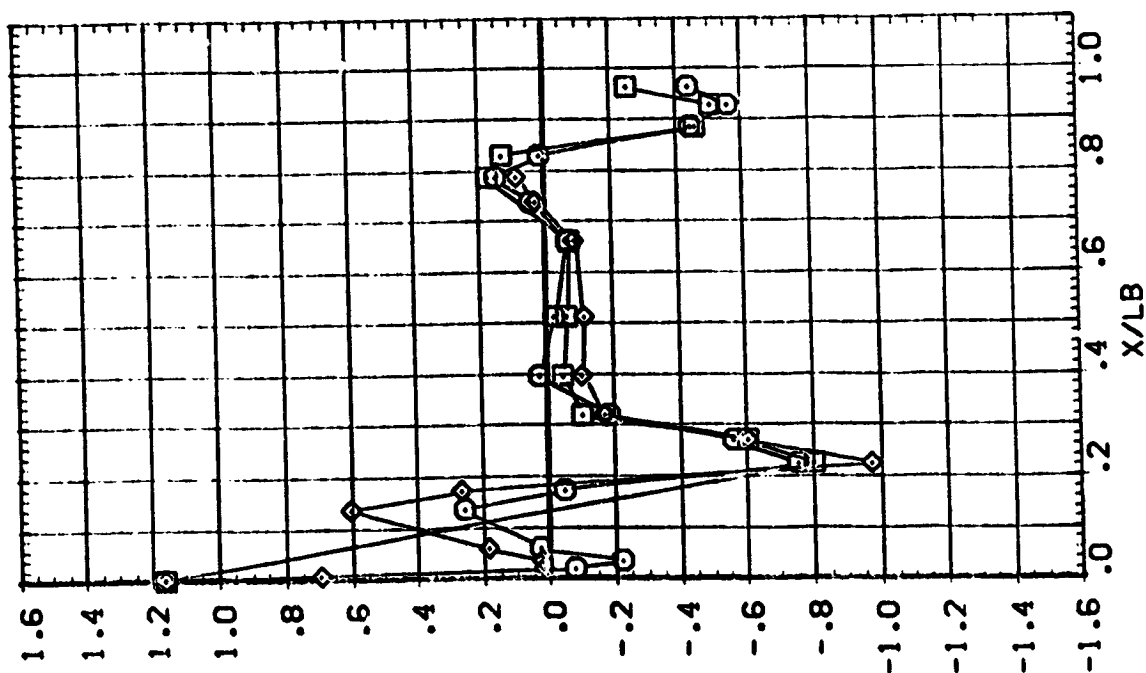
BETA
 8.440

MACH
 .905

PARAMETRIC VALUES
 .000 RUDER
 .000 RUFFLE

ALPHA
 ELEV

-10.000
 .000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

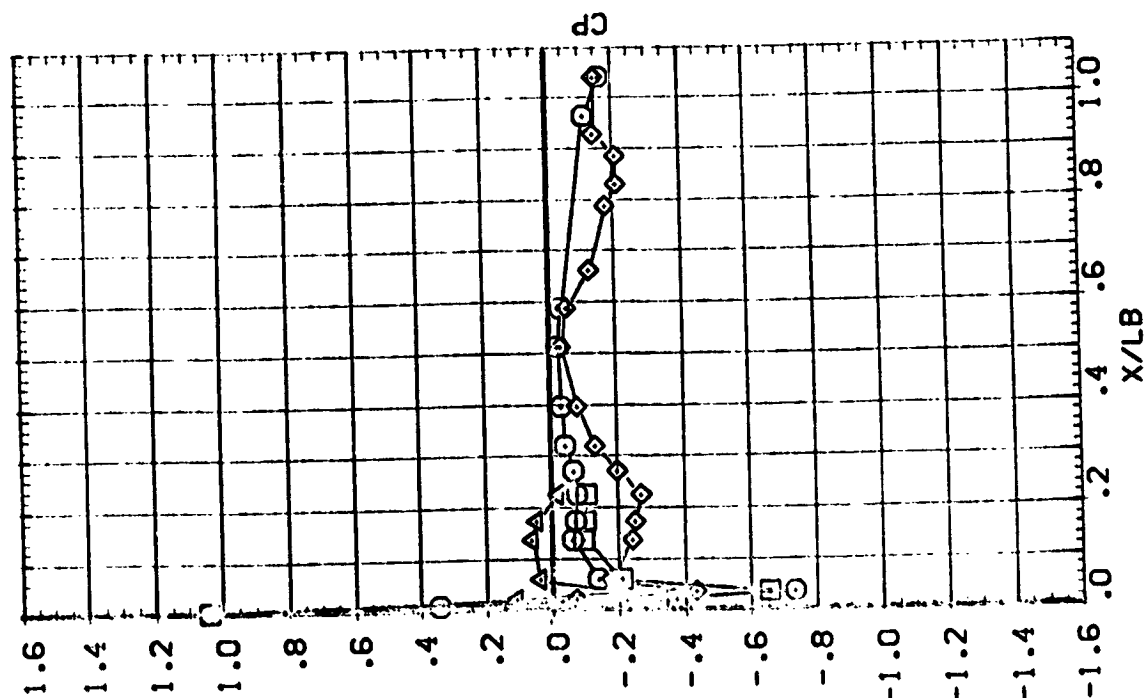
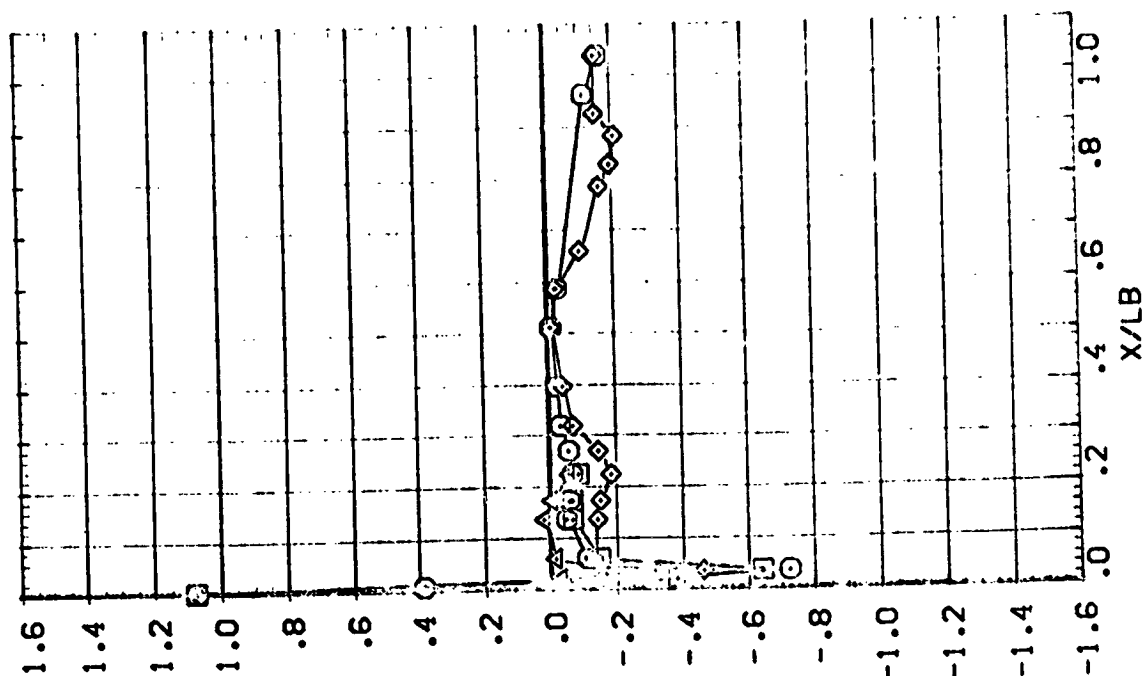
PARAMETRIC VALUES	
ADJUSTED	-20.000
ADJUSTED	.000
ADJUSTED	.000

APR 11 1964

BETA	MACH
-7.970	.599
-3.930	

21. 33.33.33.33

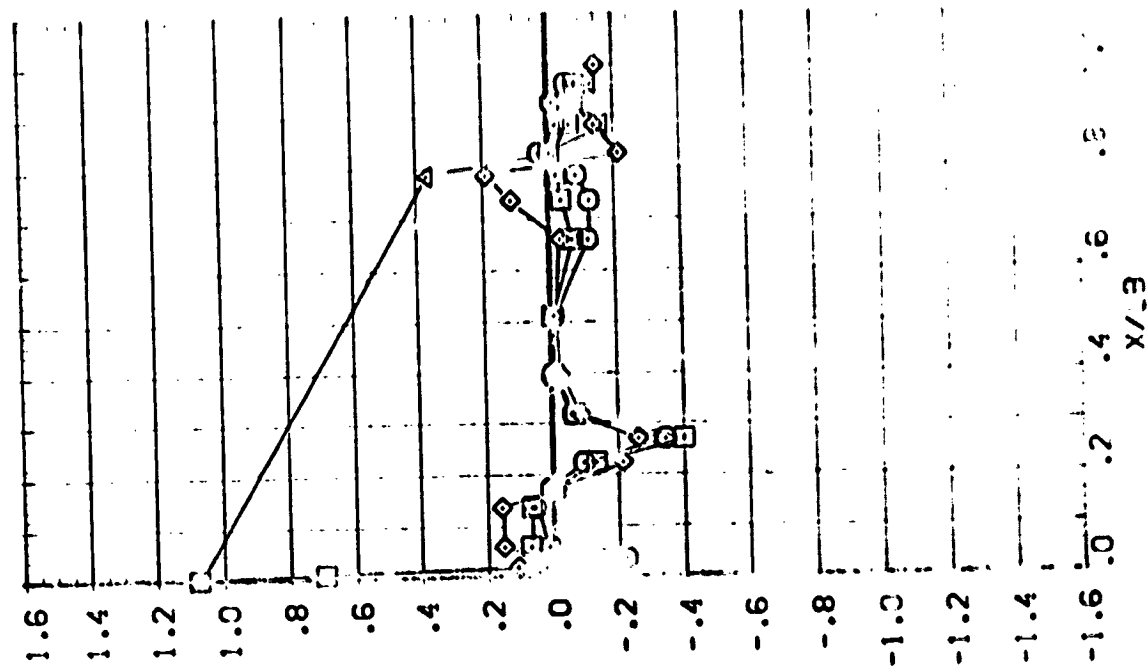
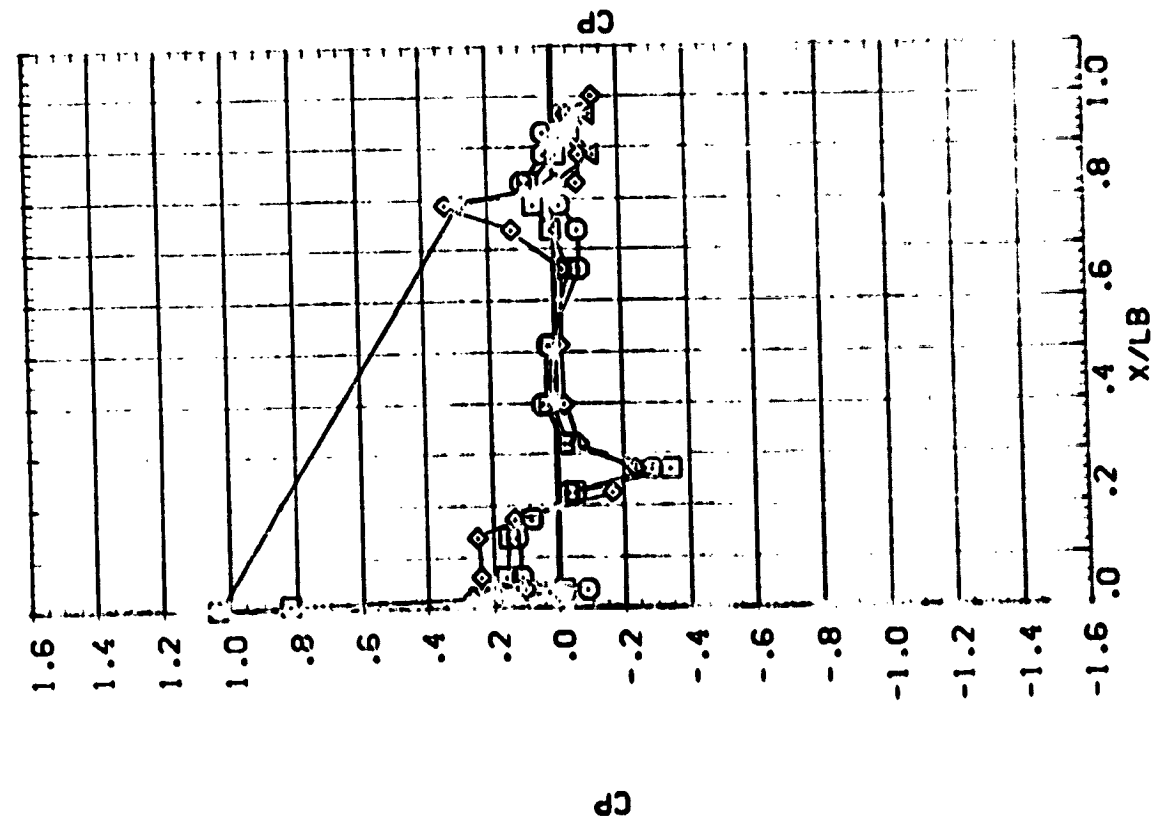
545



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

25-1
 -7.97C
 -3.93C
 25-1
 -5.99C

ALPHA	0000	0000	0000
VIA	0000	0000	0000
ELEVATION	0000	0000	0000
	-0000	-0000	-0000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES



ORBITER FUSELAGE (00000000)

ORBITER FUSELAGE (00000000)

APR 1968

07A

07A

07A

07A

07A

ORBITER FUSELAGE (00000000)

APR 1968

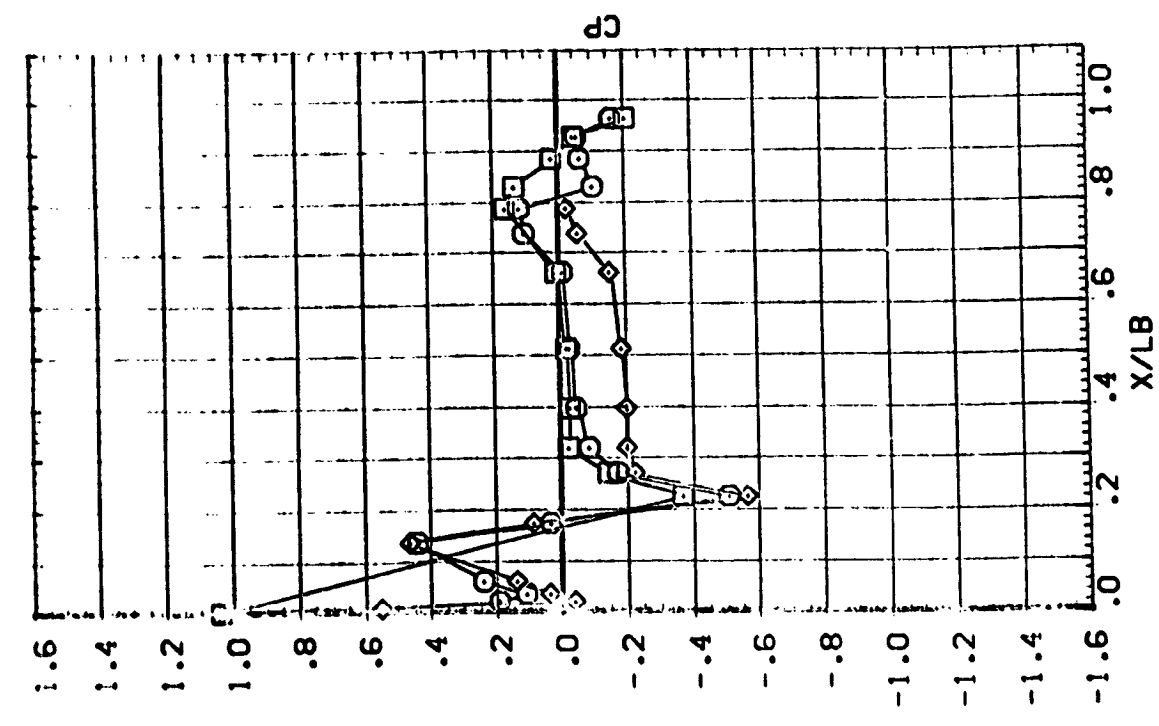
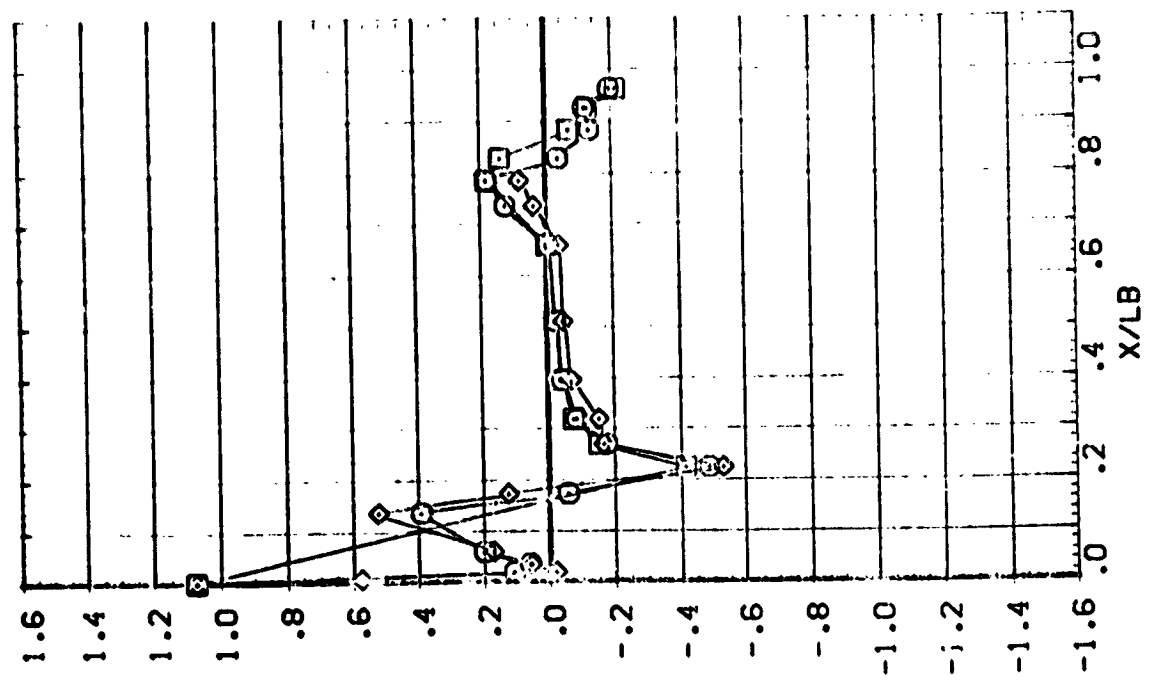
07A

07A

07A

07A

07A

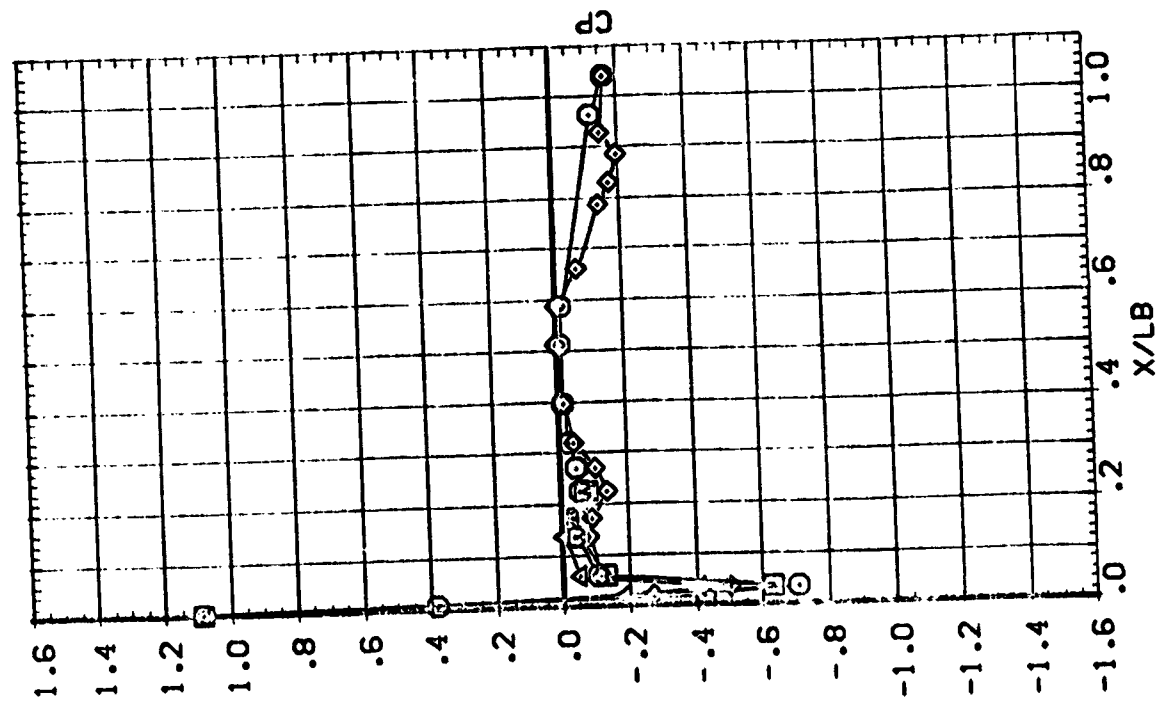
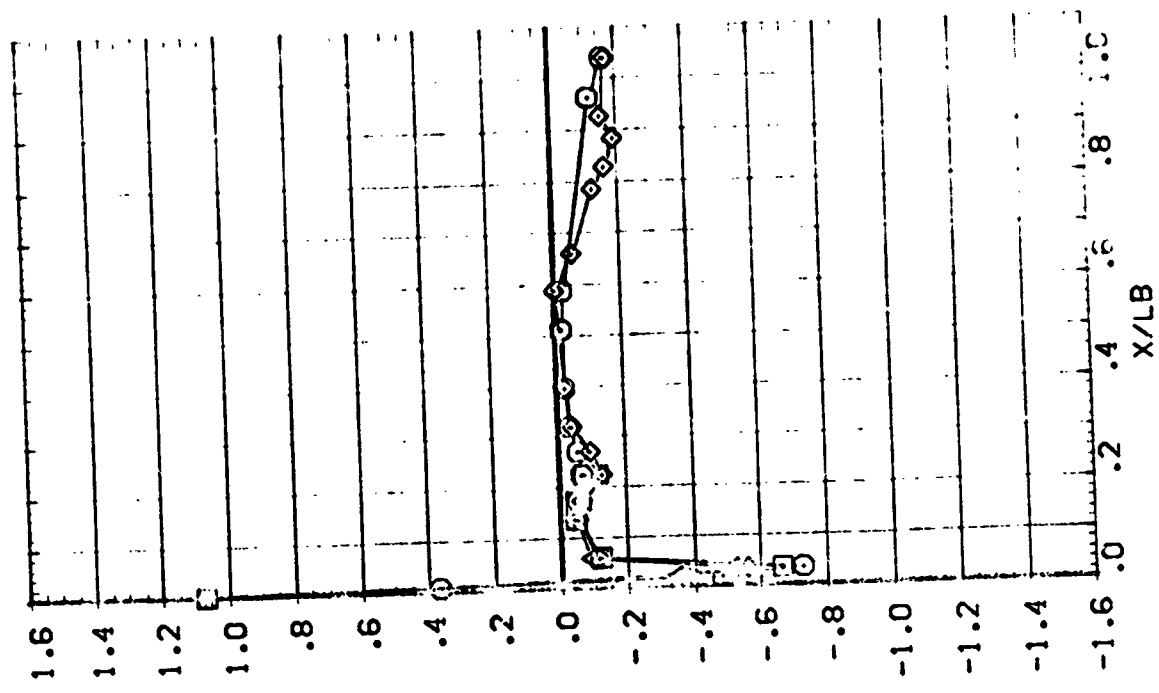


LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

A. B. A. ELEVON
 .000 .000 .000
 .000 .000 .000
 .000 .000 .000

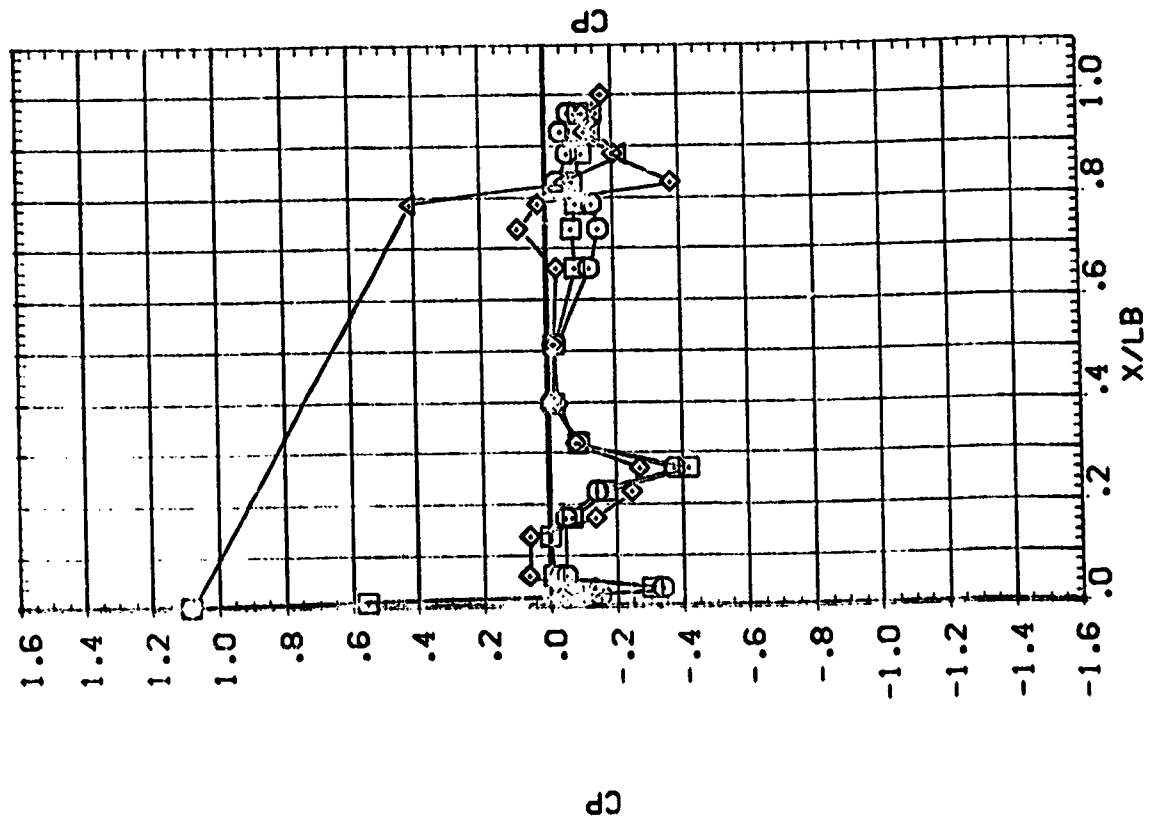
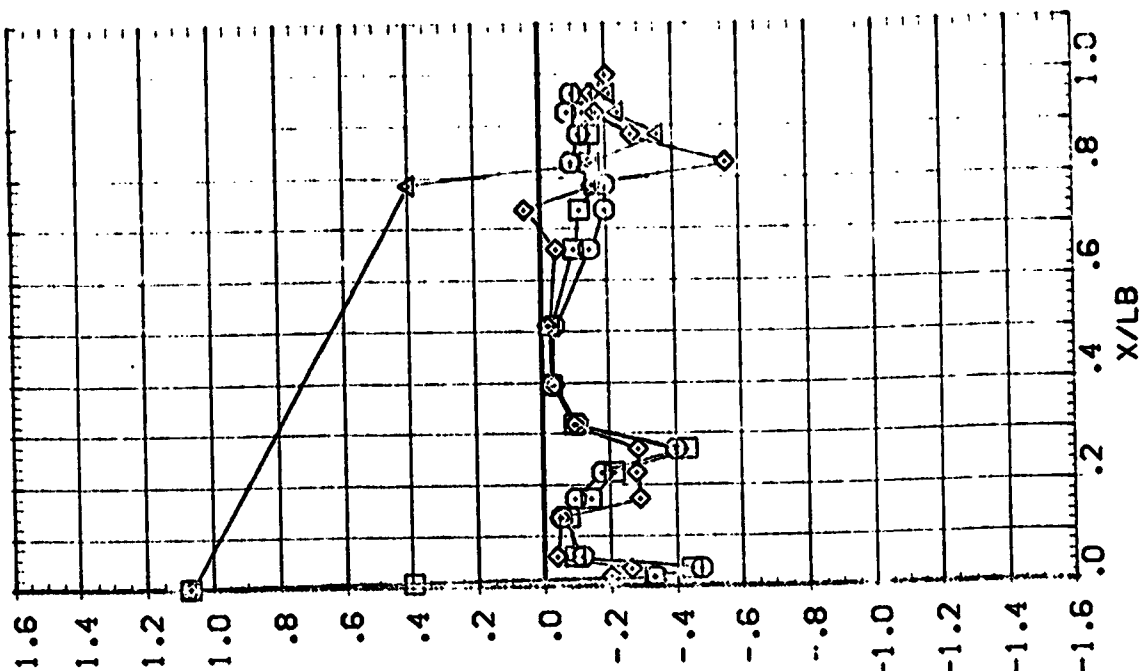
PH: .000
 20.000
 40.000
 55.000
 BETA .000
 4.210
 .000

SYMBOL
 ○
 ◇
 △



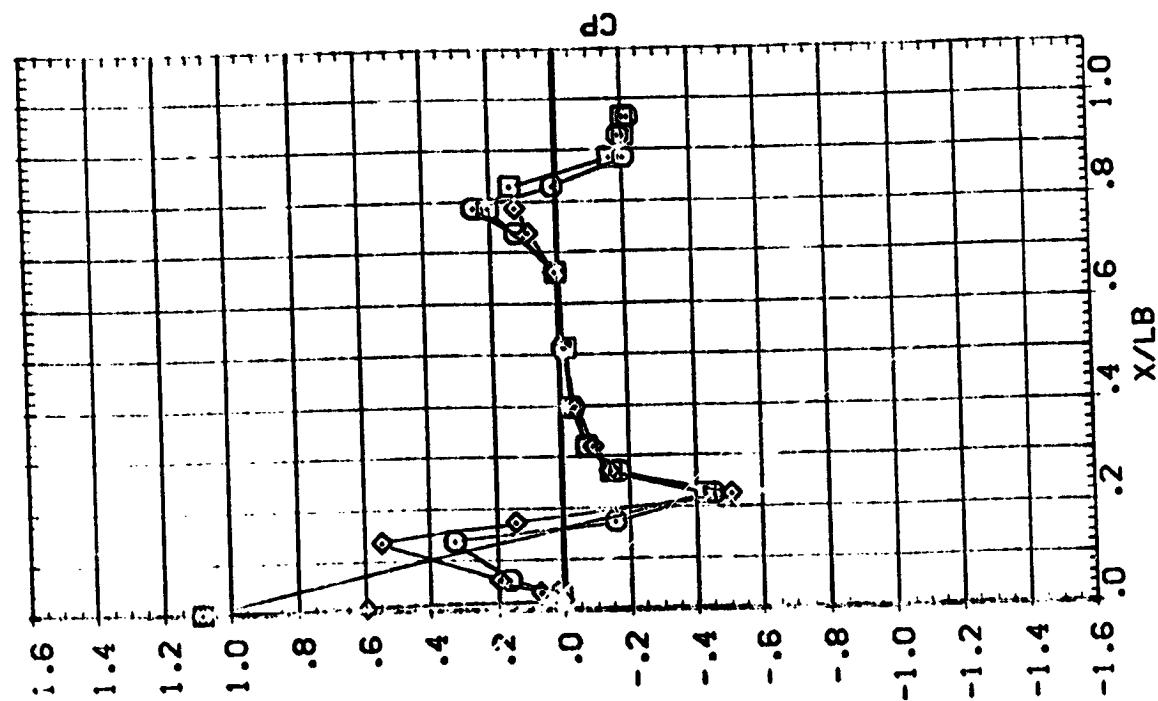
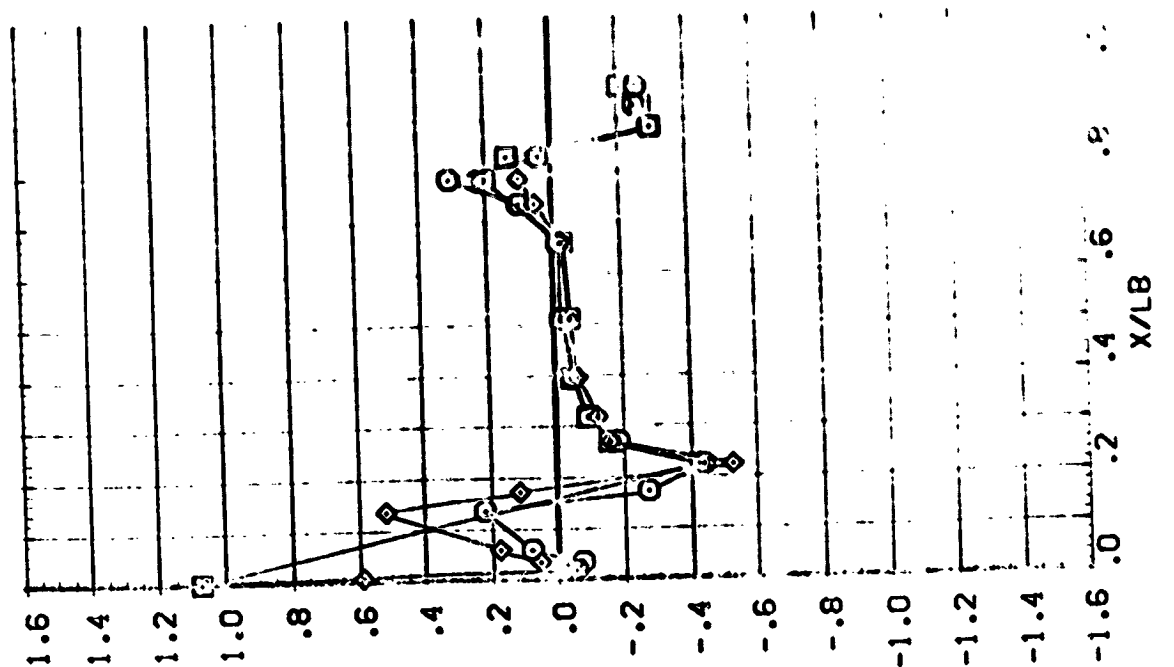
LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

SYMBOL	PHI	BETA	MACH	ALPHA	ELEV	PARAMETRIC VALUES
○	70.000	.000	.599	.000	.000	RUDER
◇	90.000	4.210		.000	.000	RUDER
△	120.000					
	135.000					



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

55.000 4.2°C
80.000

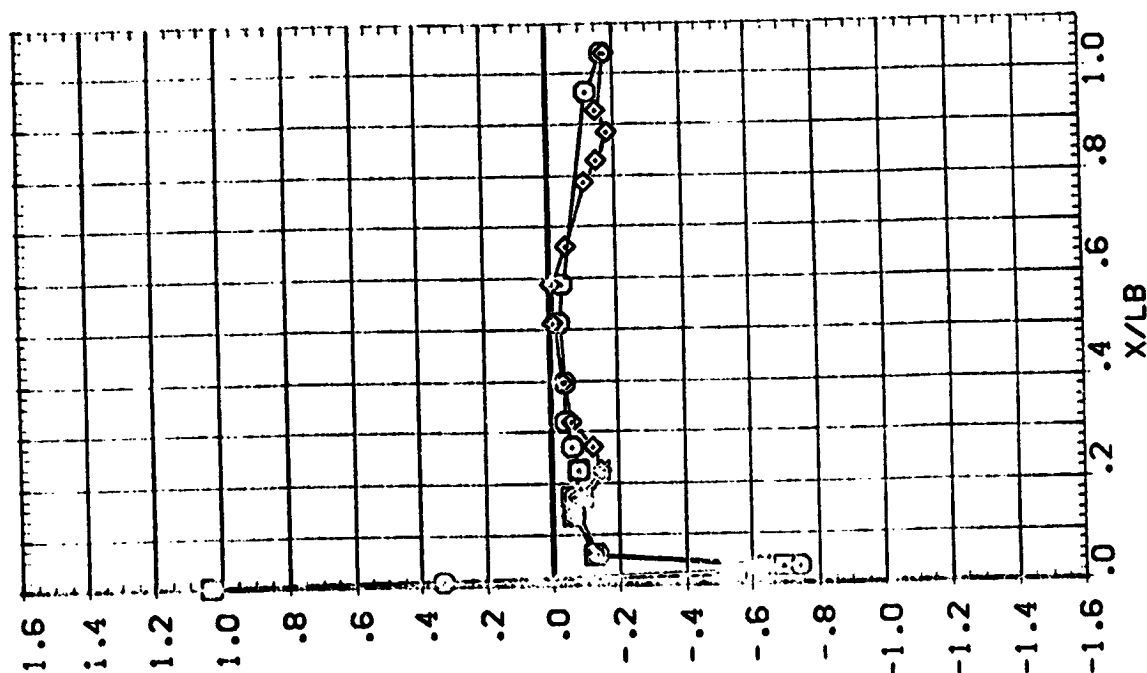


LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

SWGZ
()
()
()

BETA 8.33C MACH .598

ALPHA
ELEVON
DYNAMIC VALUES
RUDER
RUDER
RUDER
-20.000
.000
.000
.000



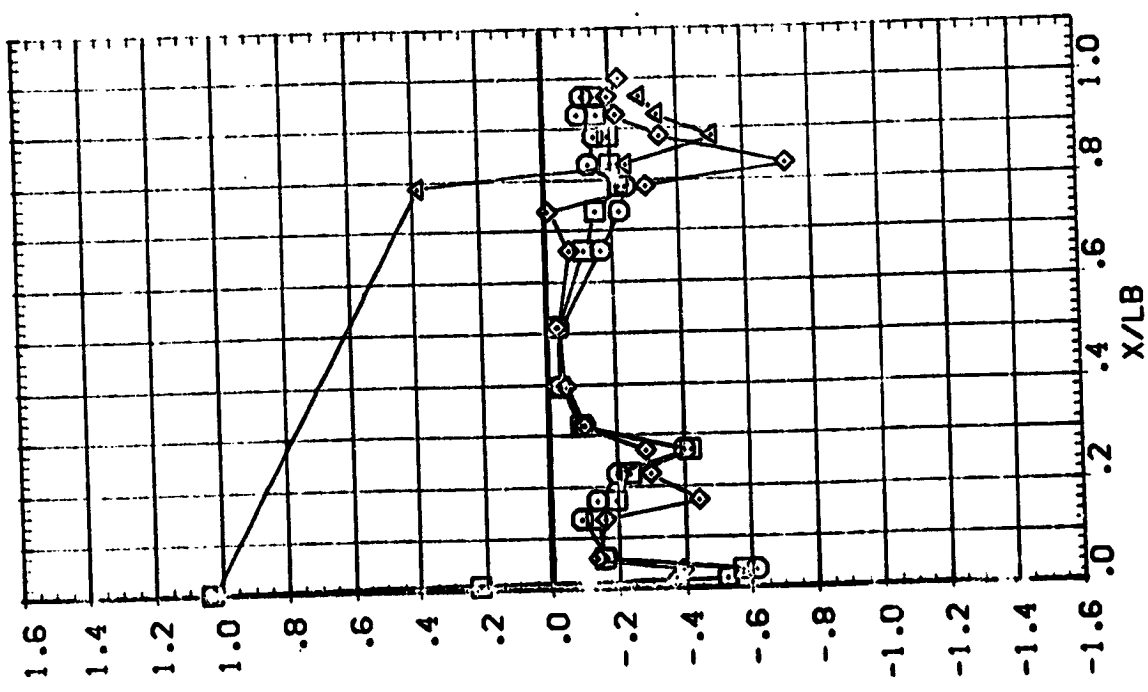
LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ELEVON

8.336

72.000
90.000
120.000
135.000

PAGE 60



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

53

ORBITER FUSELAGE (RBPB12)

AVES 11-707 CA12 02A

SYMBOL
 150.000
 165.000
 180.000

PHI
 150.000
 165.000
 180.000

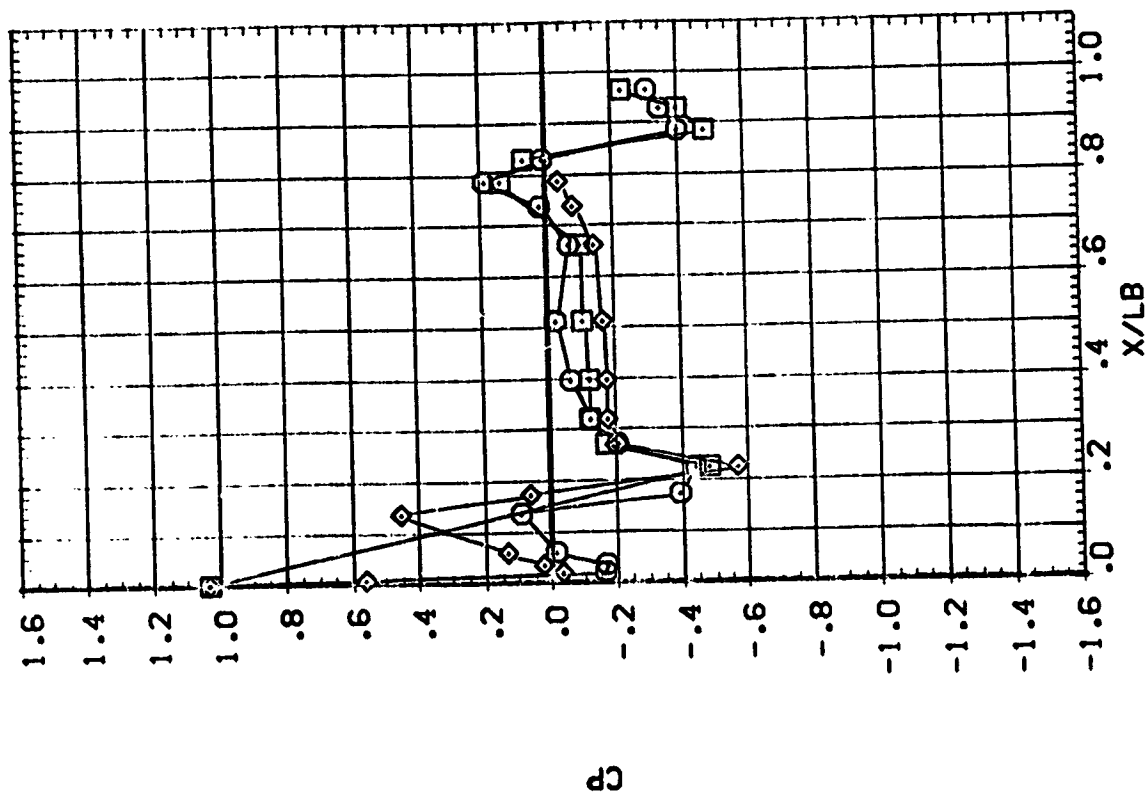
BETA 8.330

MACH .598

PARAMETRIC VALUES
 .000 Rudder
 .000 Rudder
 .000 Rudder

-20.000
 .000

ALPHA
 ELEVON

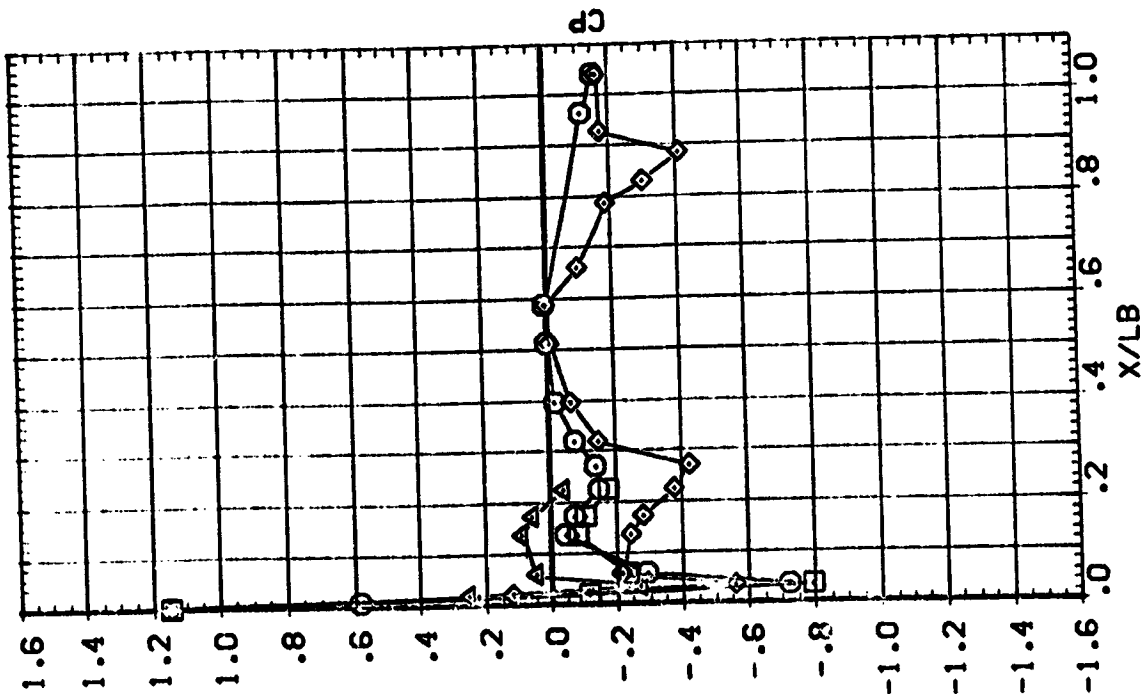
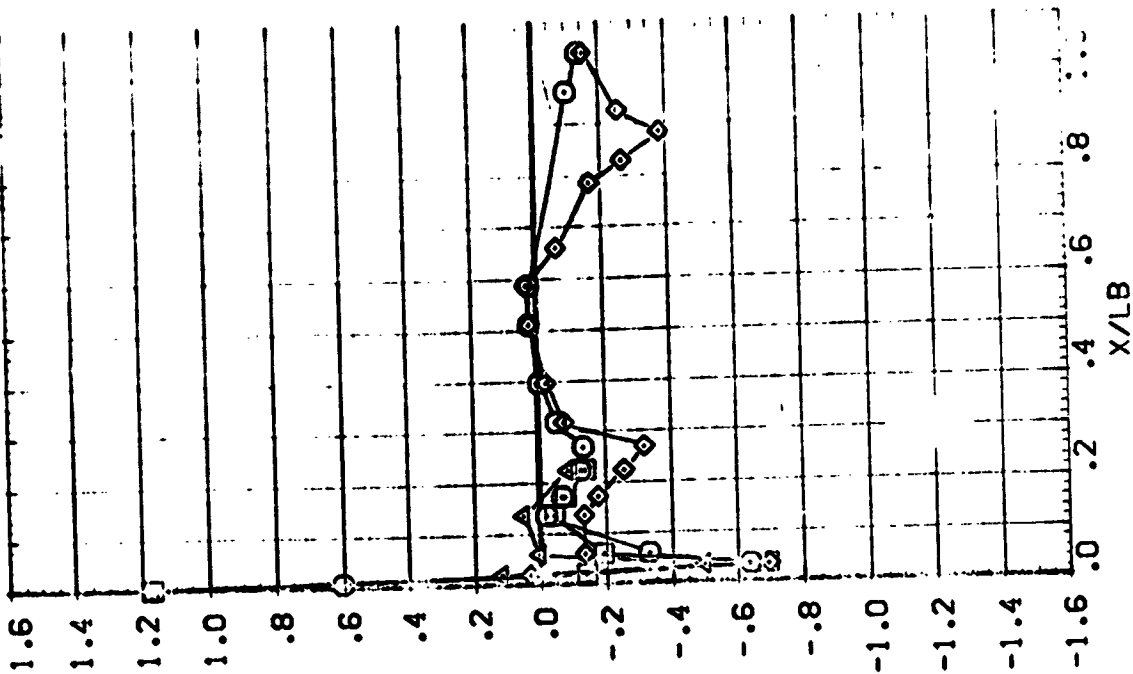


LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

PARAMETRIC VALUES
 ALPHA .000
 ELEVON .000
 .000
 .000
 .000

PHI .000
 BETA -8.000
 WACH .901
 20.000
 40.000
 55.000

SYMBOL
 O I \diamond Δ



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

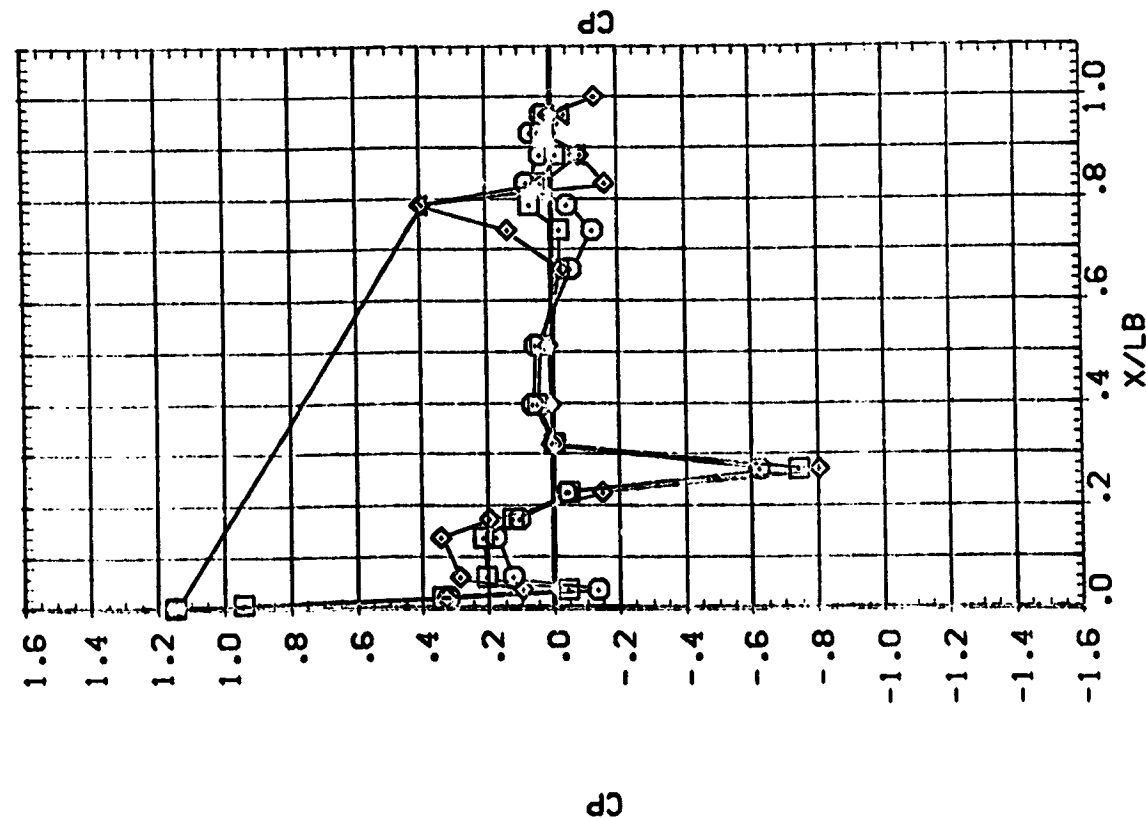
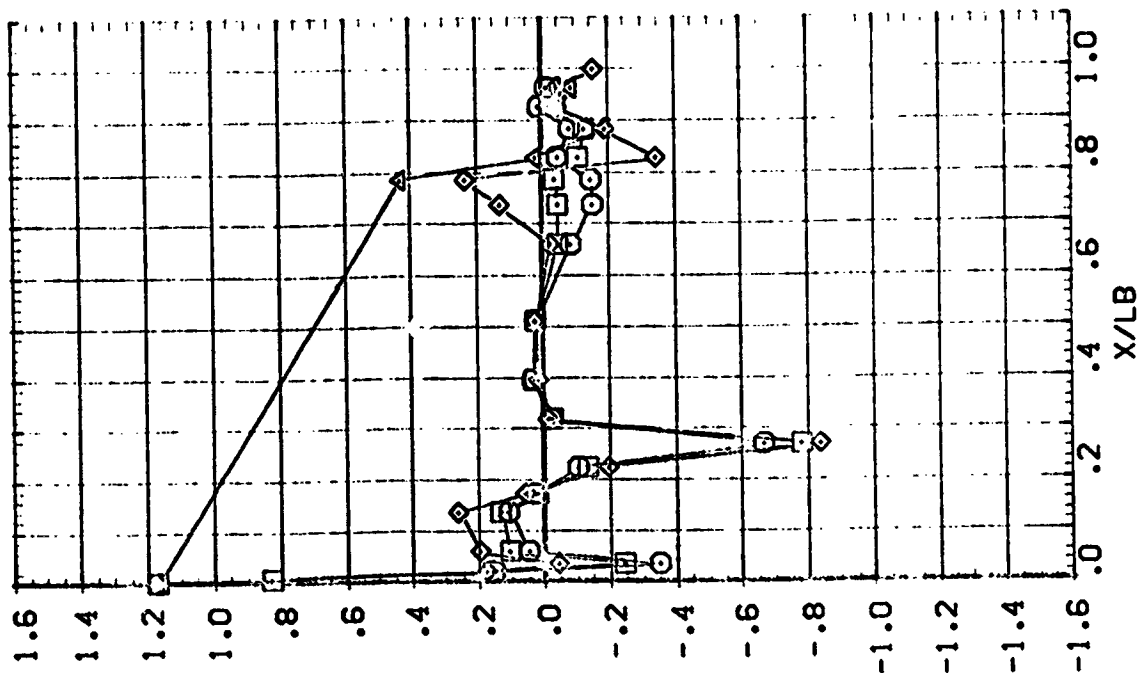
ORBITER FUSELAGE (RBPB12)

AVES :: -7C7 CA:2 02A

PARAMETRIC VALUES
 .000 RUDER -20.000
 .000 RUFLR .000

ALPHA
 ELEVON

SVVC-
 70.000 BETA MAC- .901
 90.000 -8.000
 170.000 -4.000
 35.000

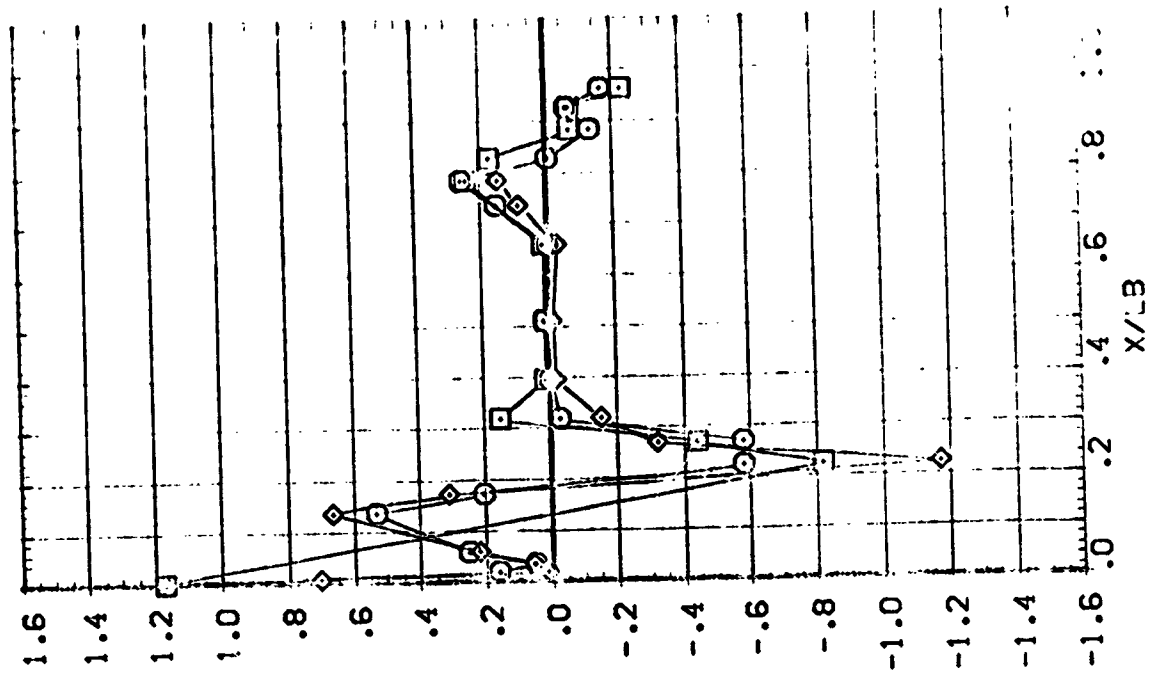
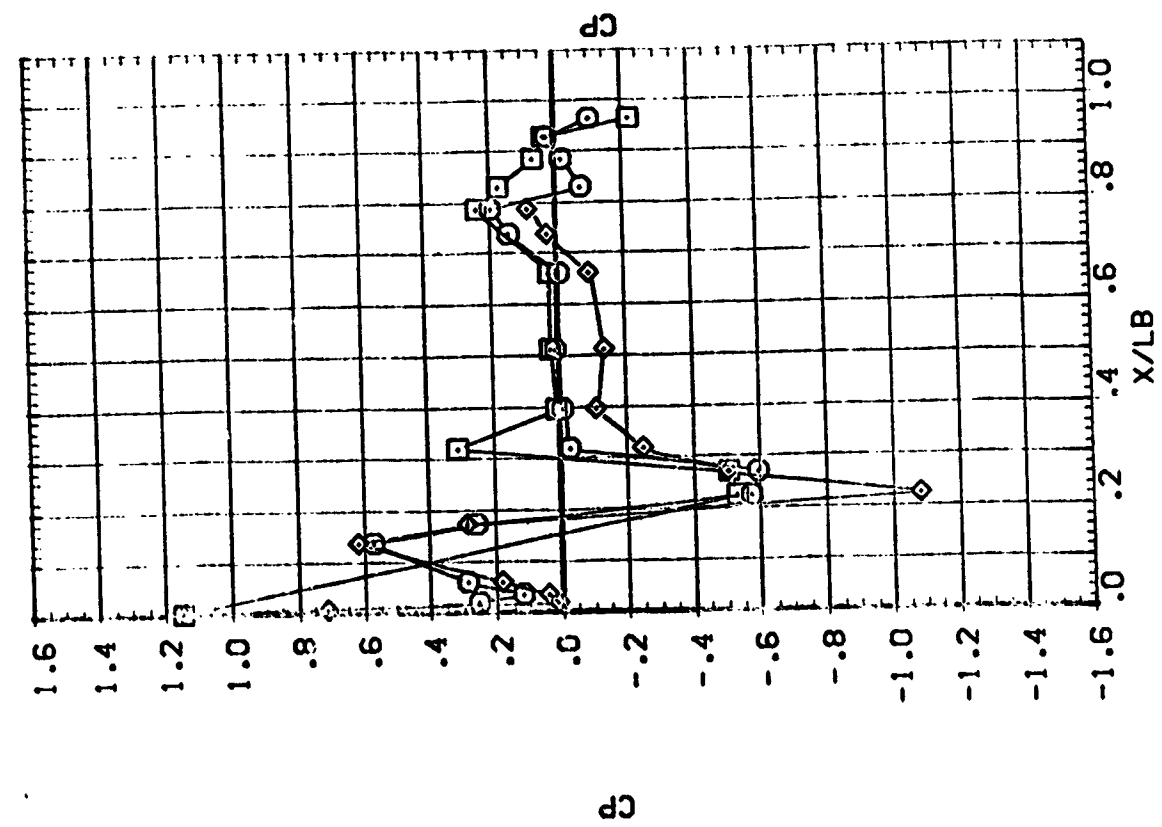


LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

U.S. AIR FORCE

SWG: BETA MACH
 :50.000 -8.090 .901
 :55.000 -4.000
 :60.000

PARAMETER VALUES
 ALPHA
 ELEVON

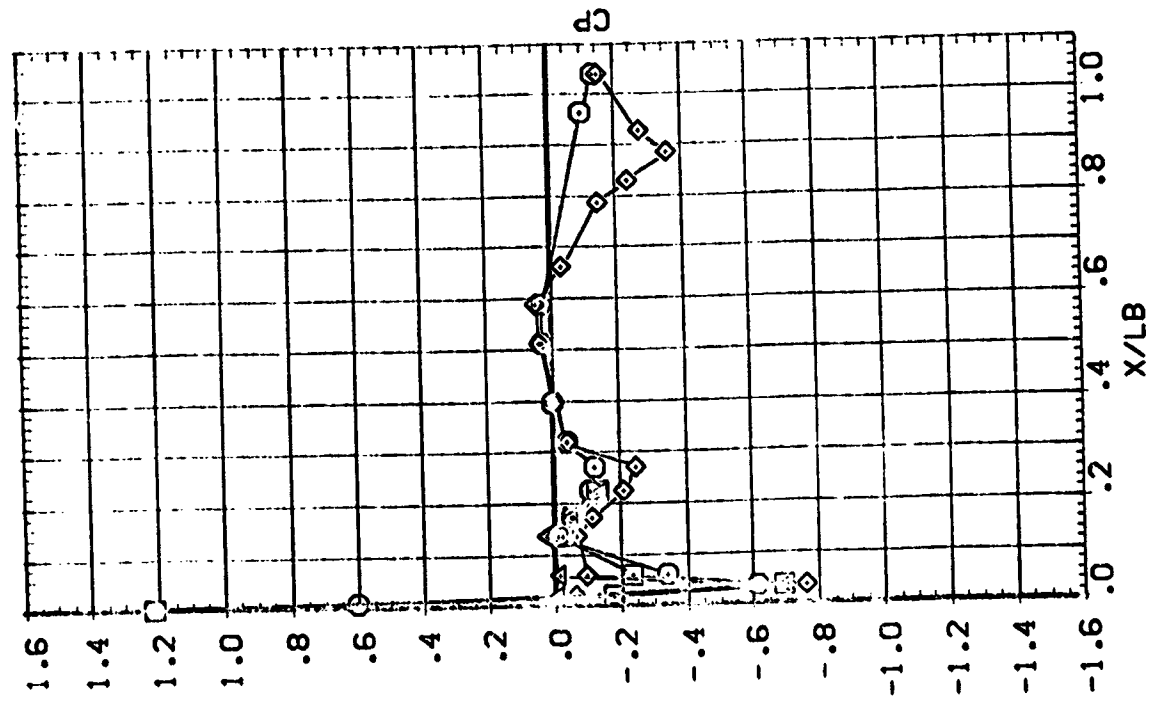
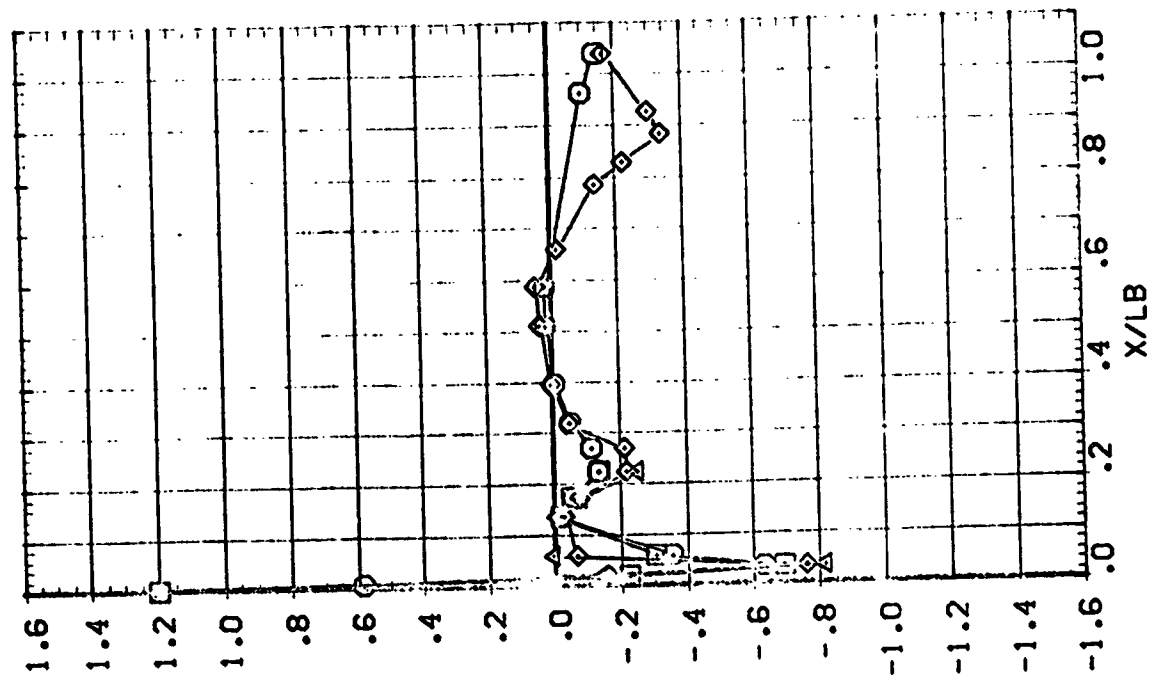


LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

PARAMETRIC VALUES
 ALPHA .000 RUDDER -20.000
 ELEVON .000 RUFLER .000

PHI: .000 MACH .900
 20.000
 40.000
 55.000

SYMBOL
 ○
 ◇
 △



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

5-22
01104

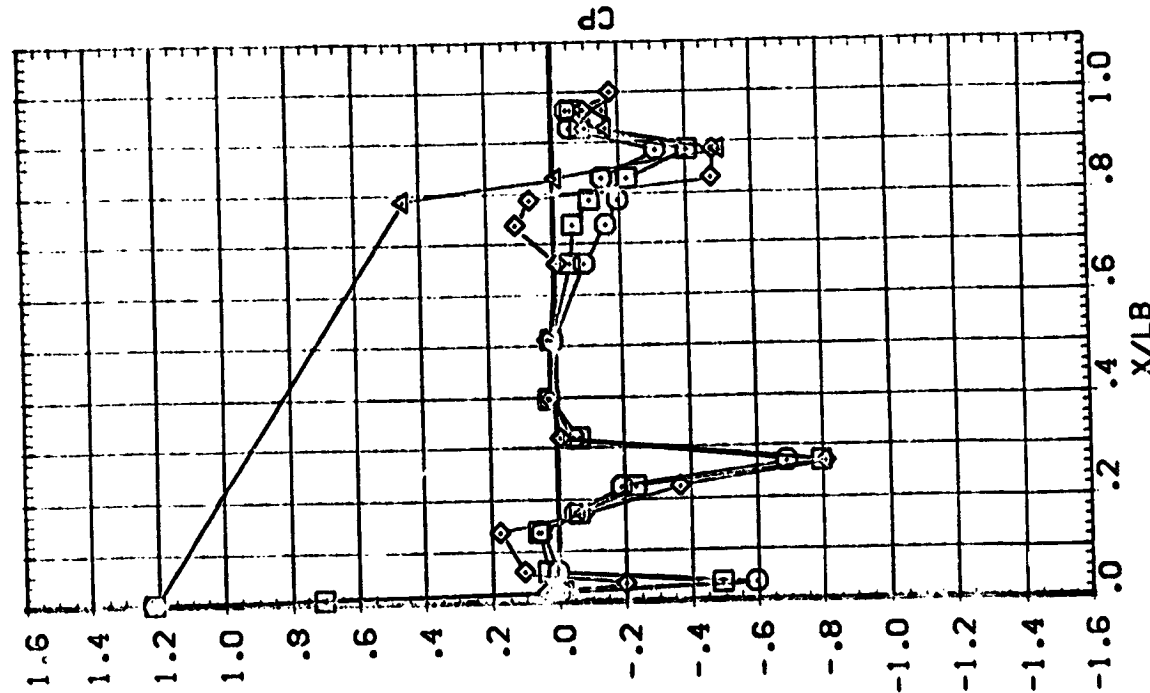
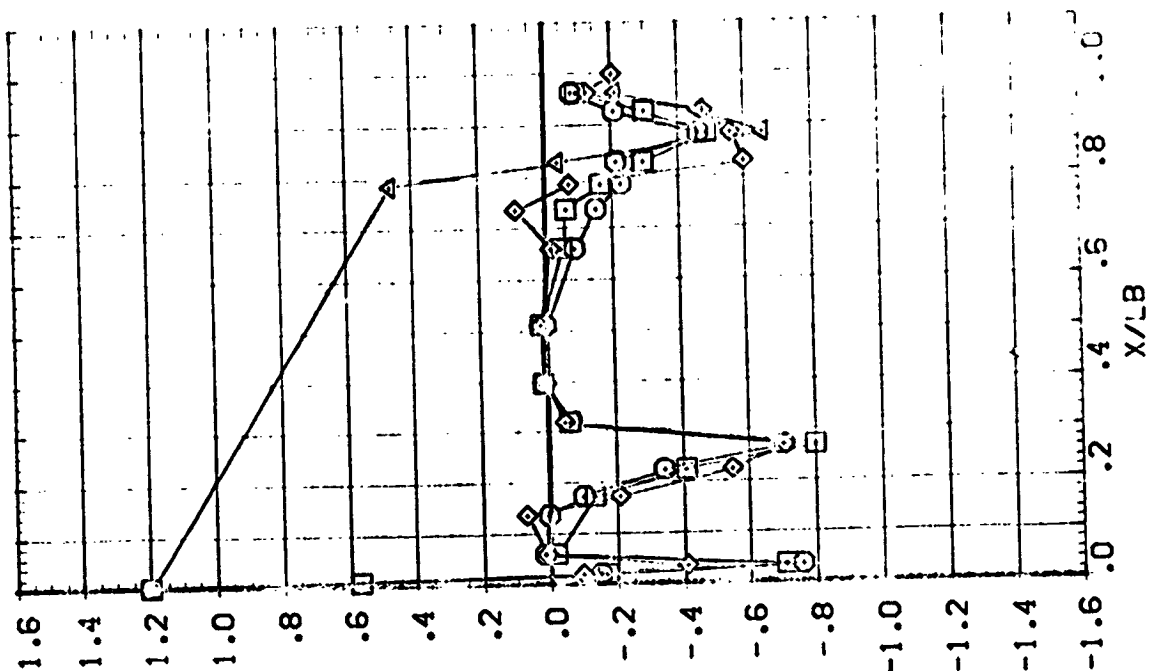
PA: 70.000
90.000
120.000
135.000

BETA .100
4.28C

MACH .900

PARAMETRIC VALUES
ALPHA .000
ELEVATION .000
RUDLER .000
RUDFLR .000

-70.000
-20.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

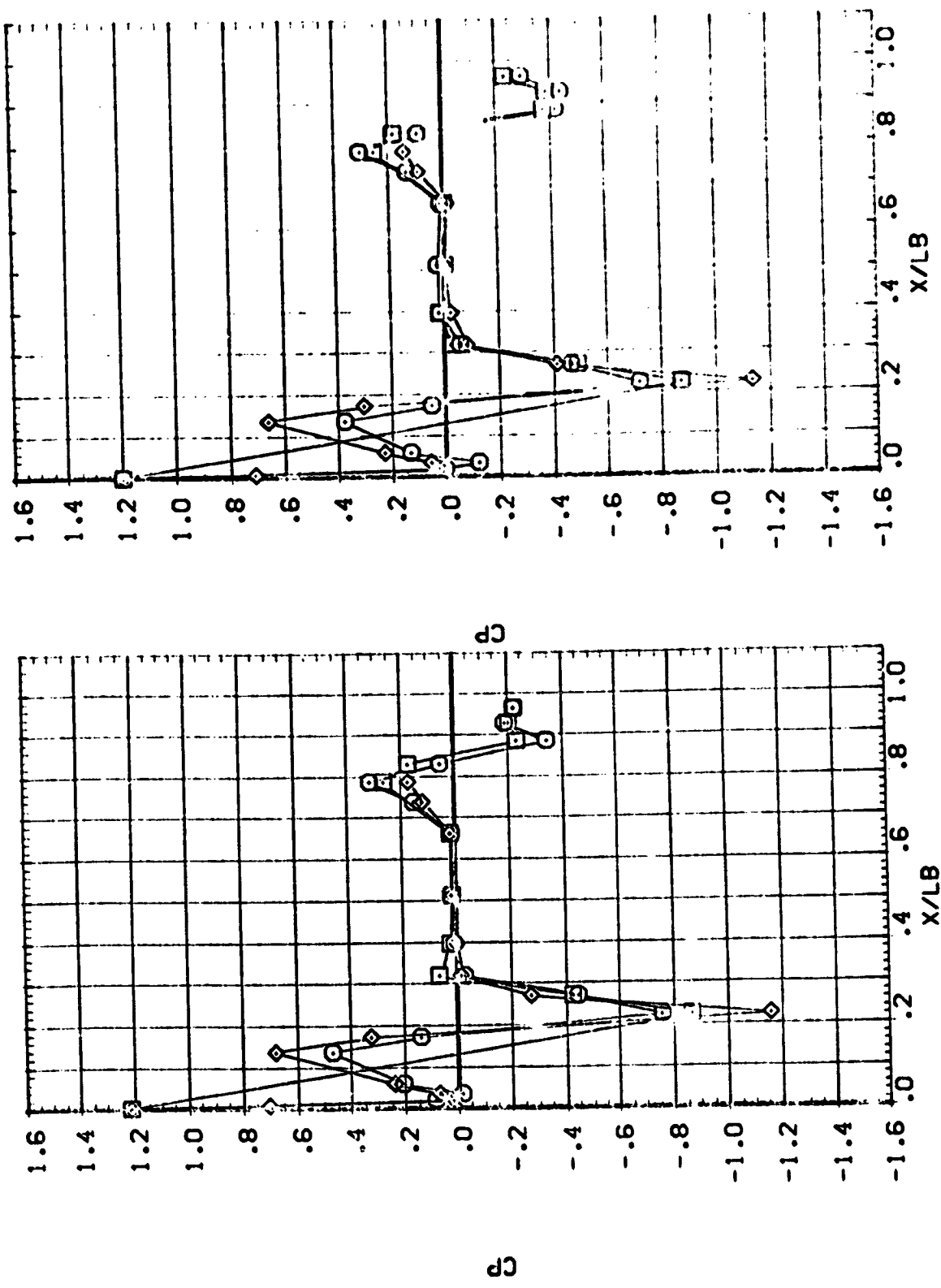


AVES 11-707 0A12 02A ORBITER FUSELAGE (RBPB:2)

SYNCH: 150.000 BETA: .100 MACH: .900
165.000 4.280
180.000

BASELINE VALUES

ALPHA: .000
ELEV: .000
ROLL: .000
PITCH: .000
YAW: .000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

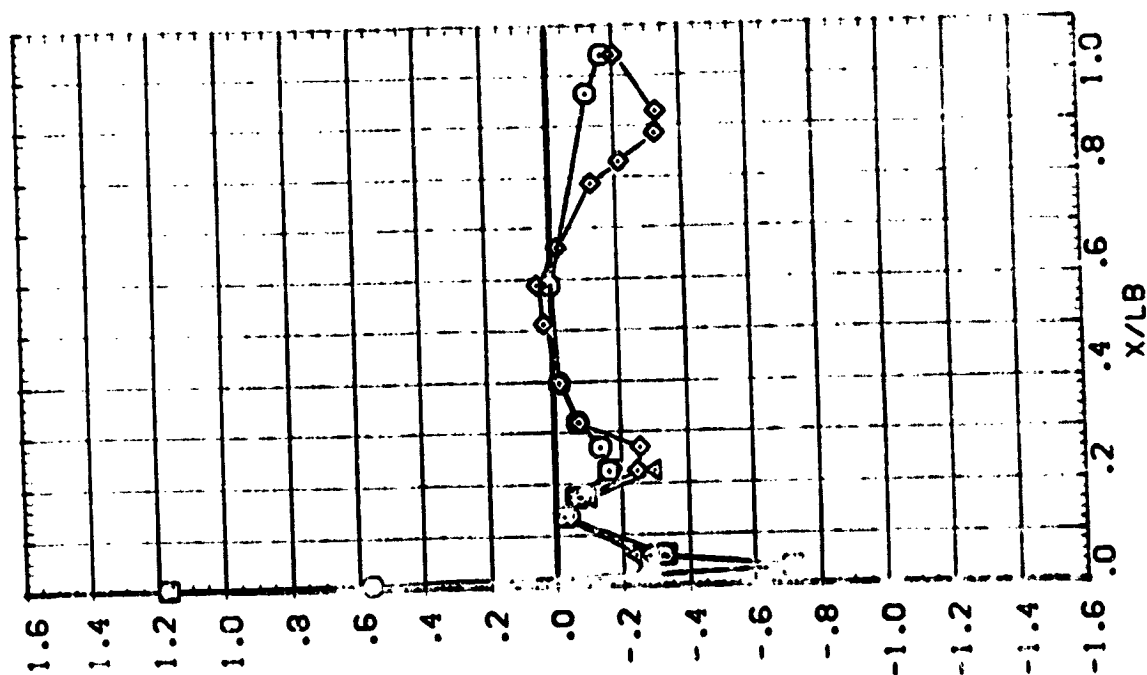
CRBITER FUSELAGE (R33312)

AVES 11-707 CA12 C2A

SYSC-
0
0
0

BETA 8.450 MACH .903

ALPHA
ELEVATION



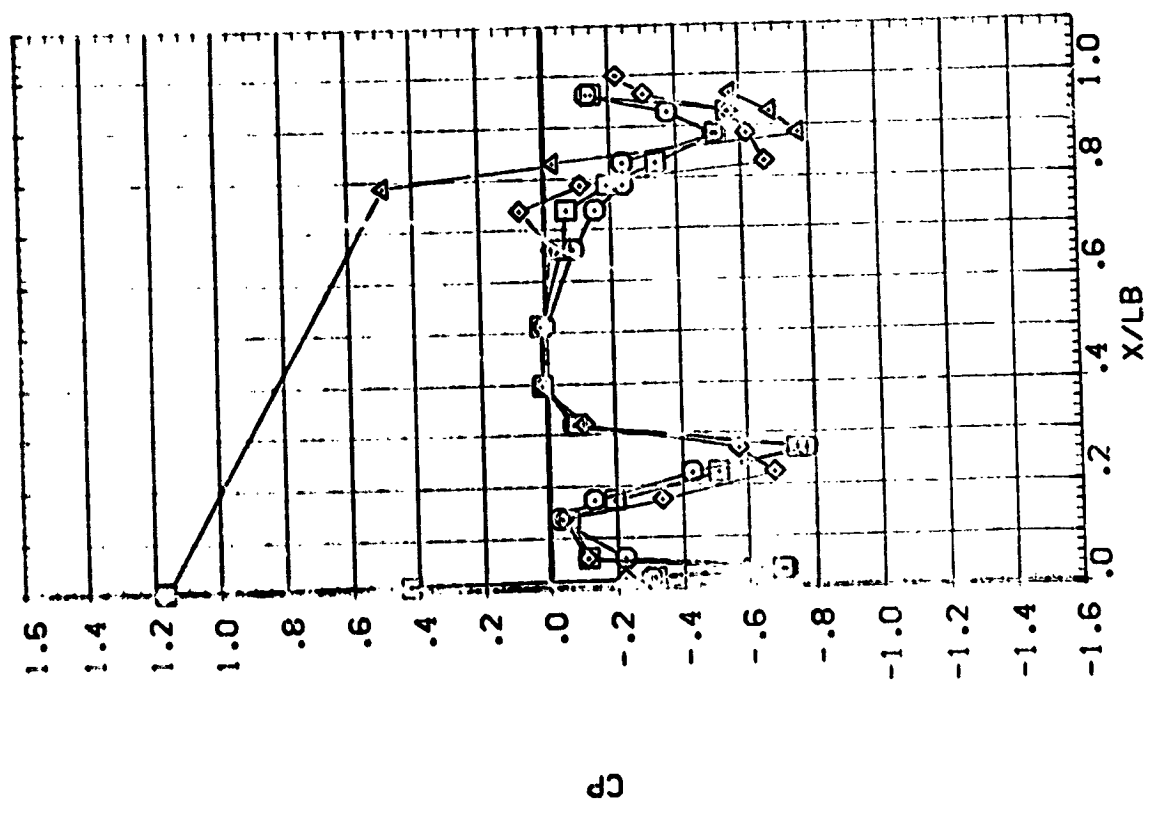
LONGITUDINAL DISTRIBUTION OF CRBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (333310)

22

8.450 9.533

10.000
9.500
9.000
8.500
8.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

SYMBOL
○
◇
△

PM: .000
20.000
40.000
55.000

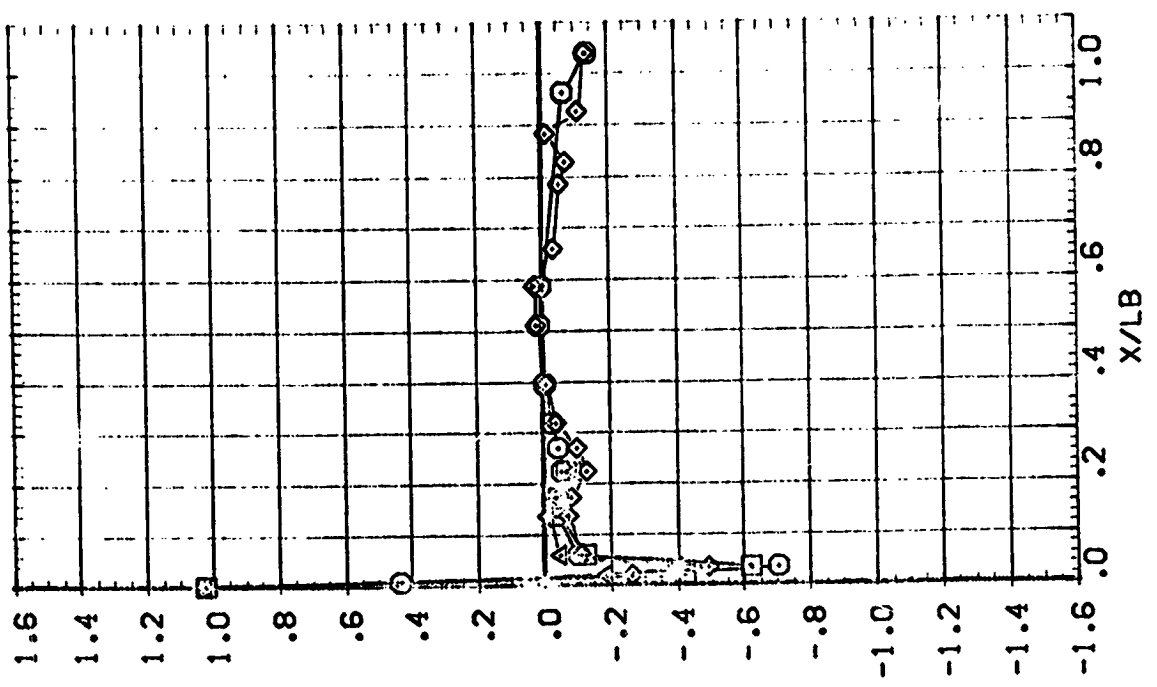
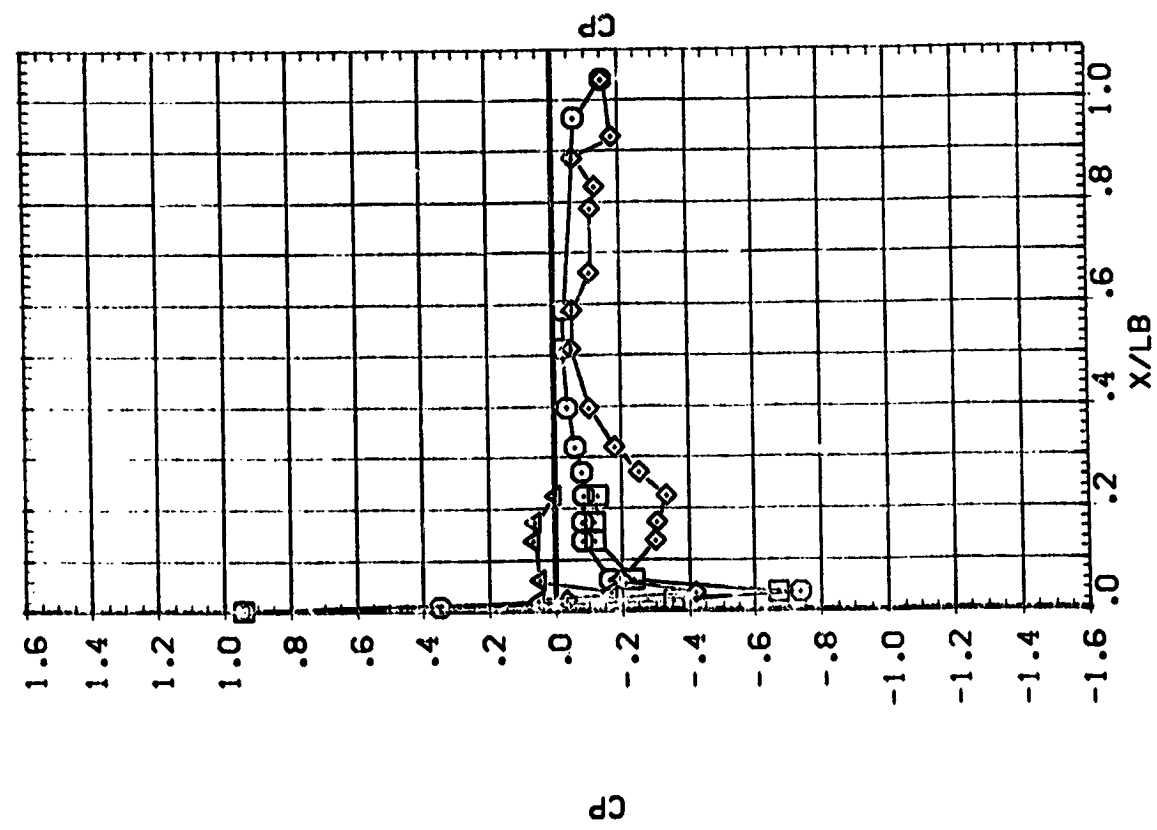
BETA
-10.000
.080

MACH
.597

PARAMETRIC VALUES
ALPHA
ELEVON

.000
10.000

RUDDER
RUDEFLR

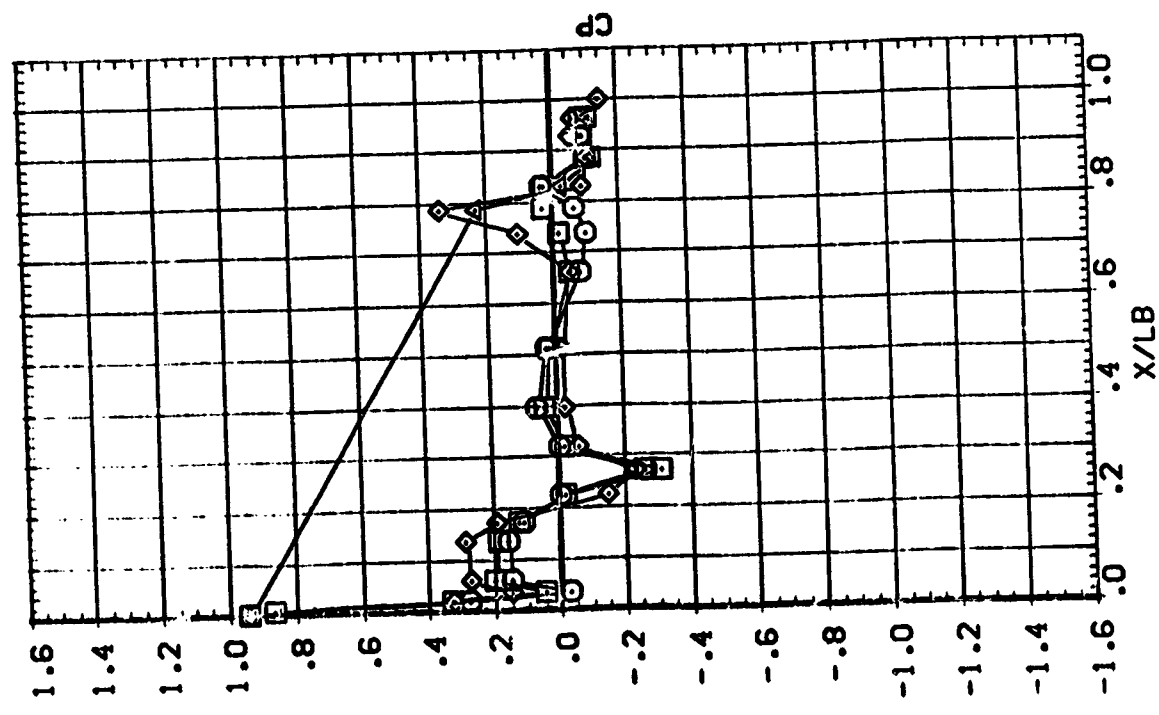
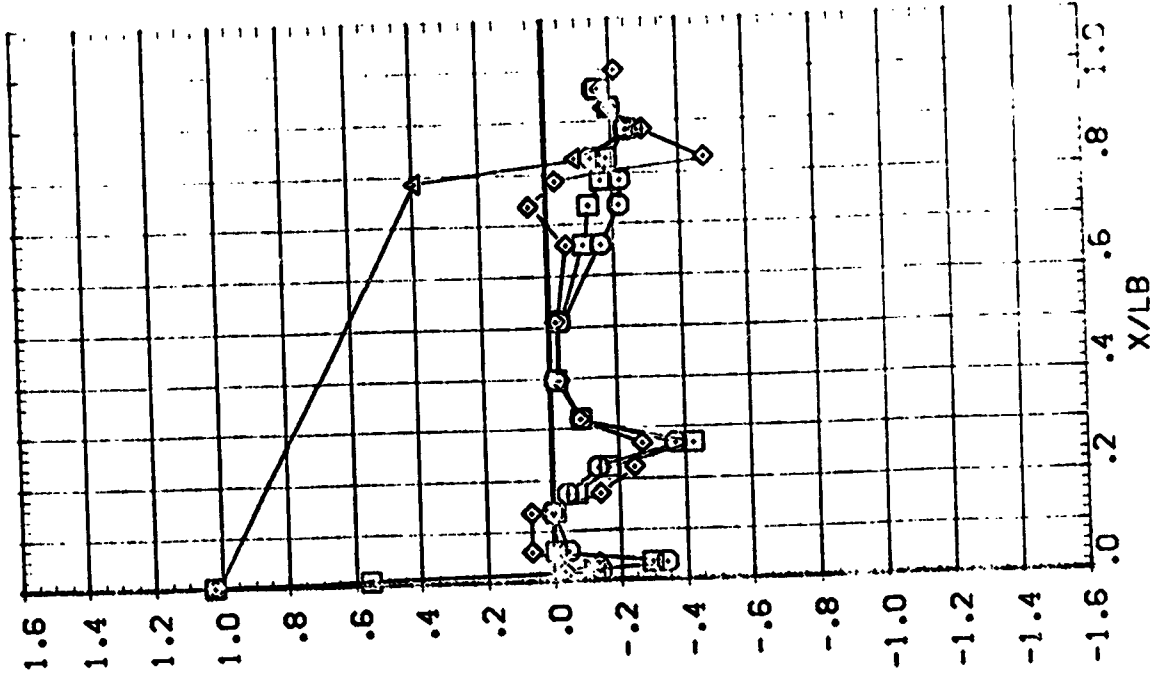


LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

PARAMETRIC VALUES
ALPHA .000
ELEVON 10.000
RUDDER .000
RUDDER .000

PHI 70.000
BETA -10.000
WASH .597
90.000
120.000
135.000

SYMBOL
-
O
□
◇
△



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

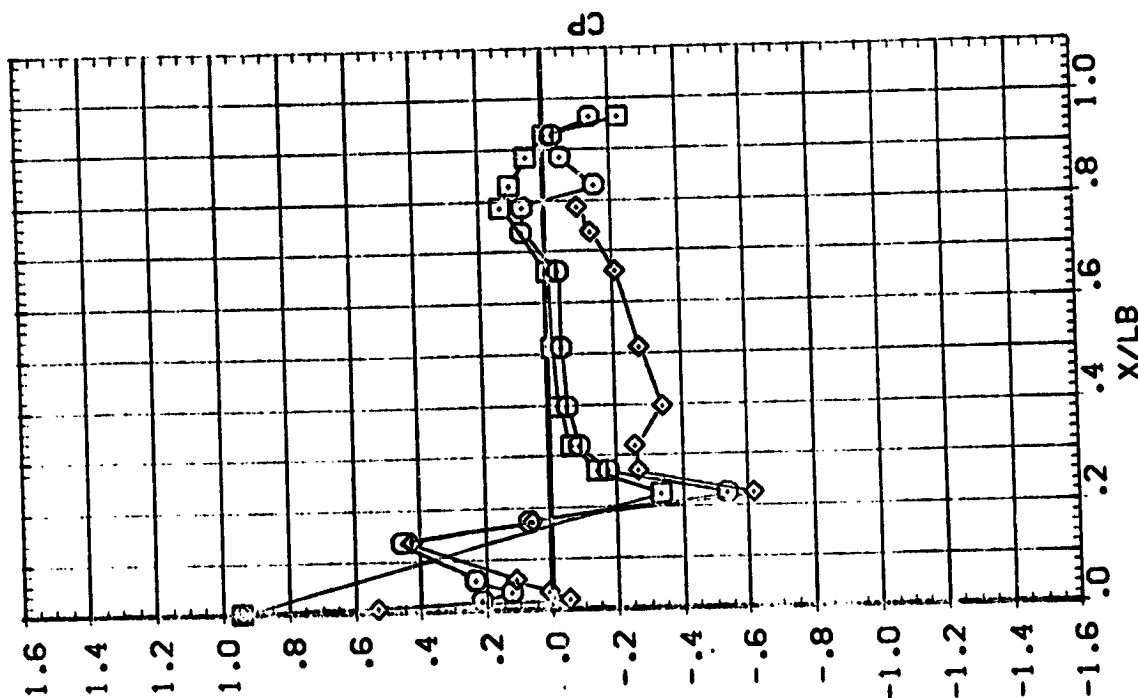
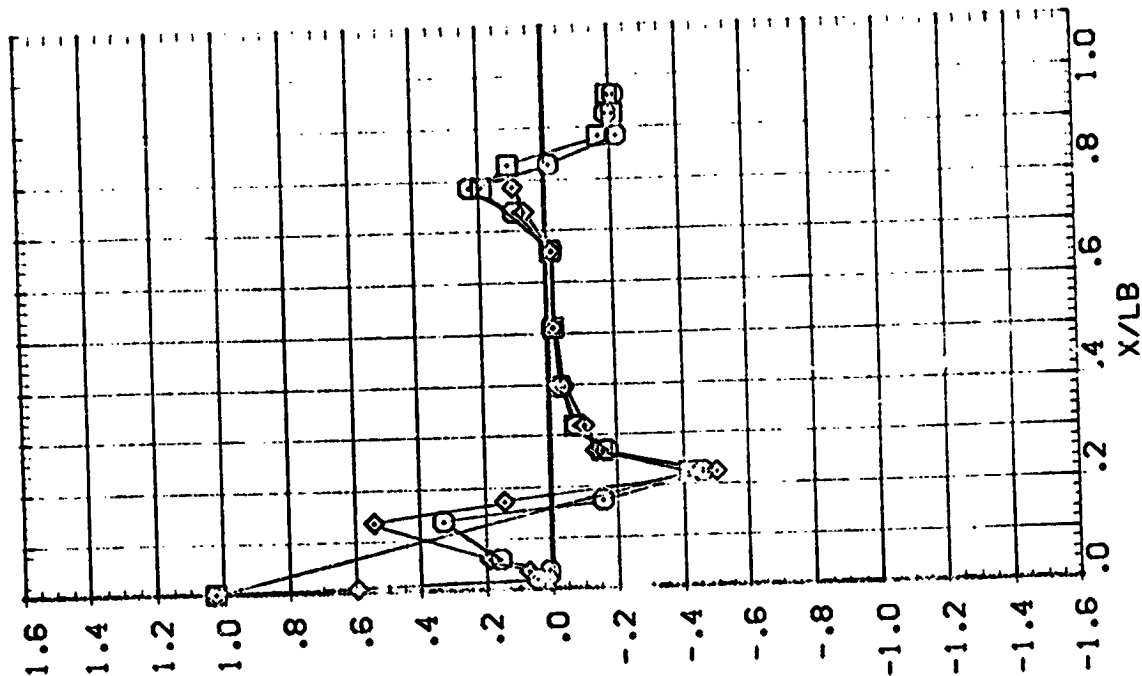
SWBC-
O I I

PH: 150.000
165.000
180.000

BETA -13.000
.090

MACH .597

PARAMETRIC VALUES
ALPHA .000
ELEVON 10.000
RUDDER .000
RUDDER .000

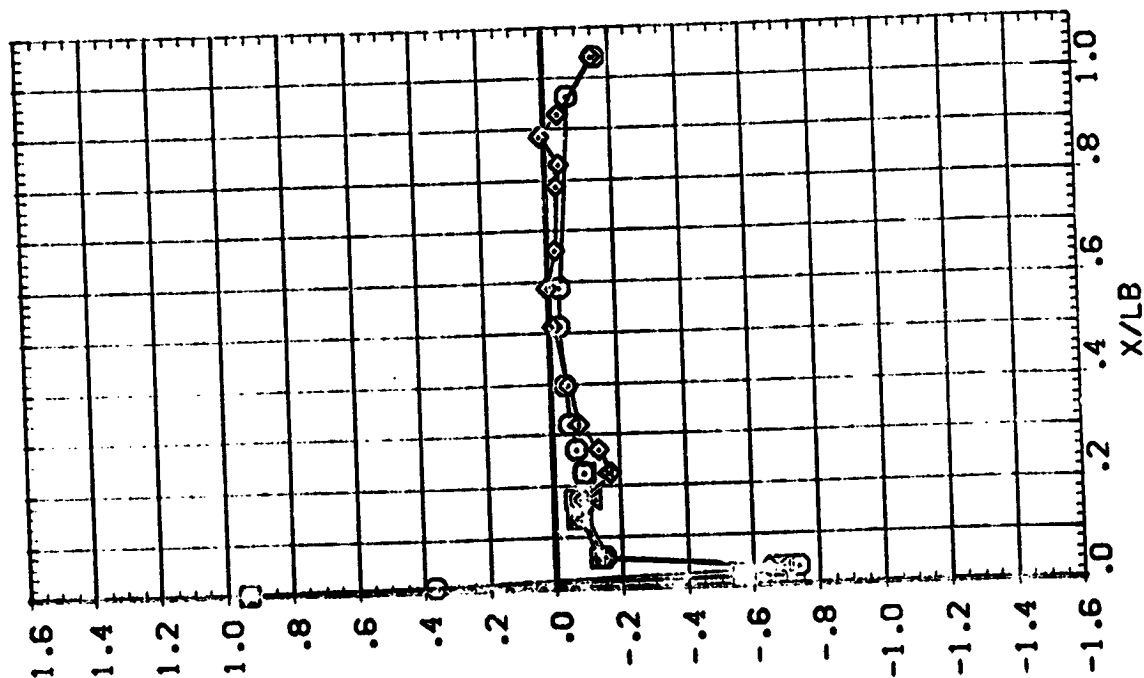


LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

۱۰۰
 ۱۰۱
 ۱۰۲
 ۱۰۳
 ۱۰۴

88

ALPHA
ELEVEN

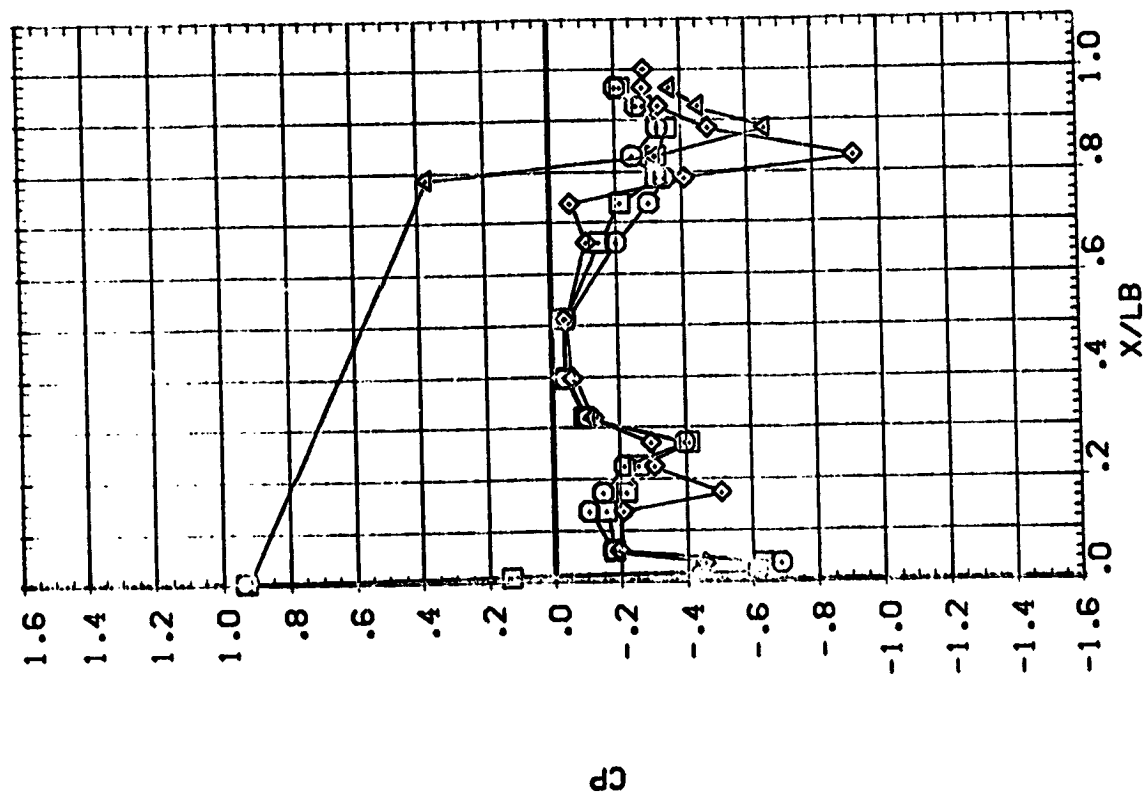
CASE
.. .. .

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

DEAS	pH:
△	55.000
◇	49.000
○	27.000
○	.000

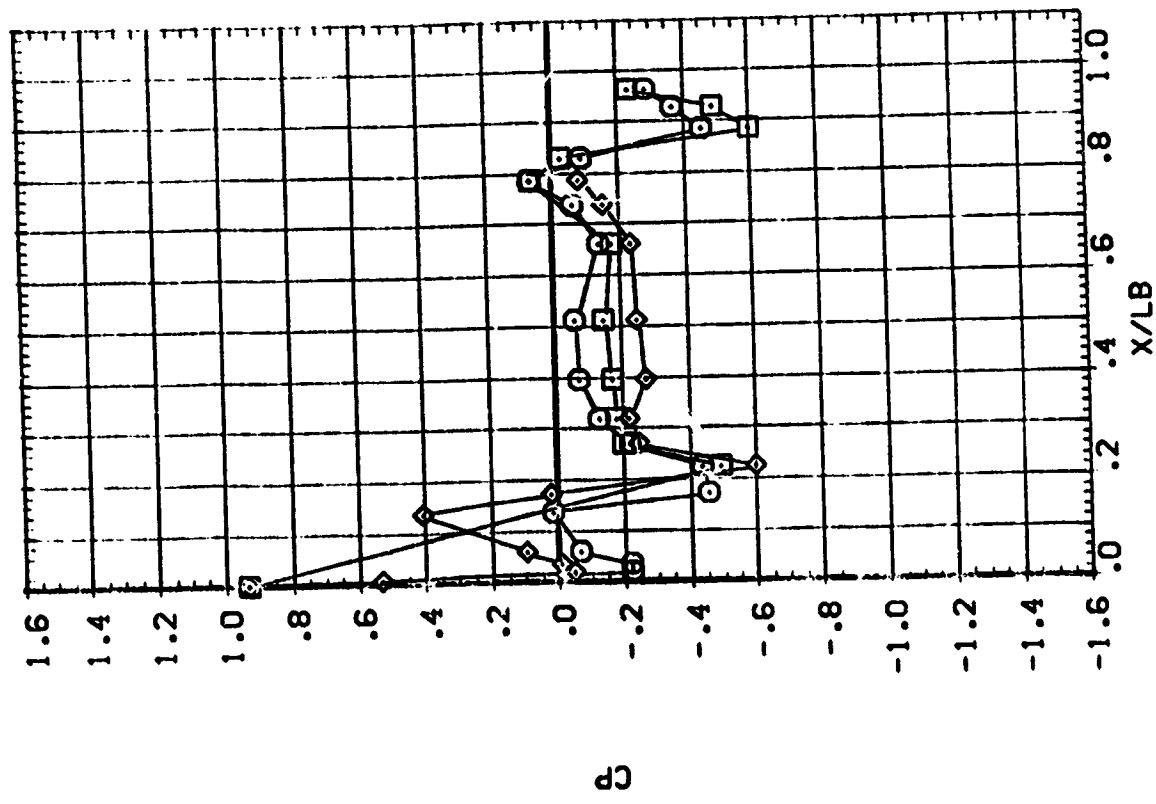
BETA	WACH
10.370	.600

(c) (1) The following information shall be provided:



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

0110
 :50.000 :3.370 .600
 :65.000
 :80.000
 ELEVON :0.000
 :000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

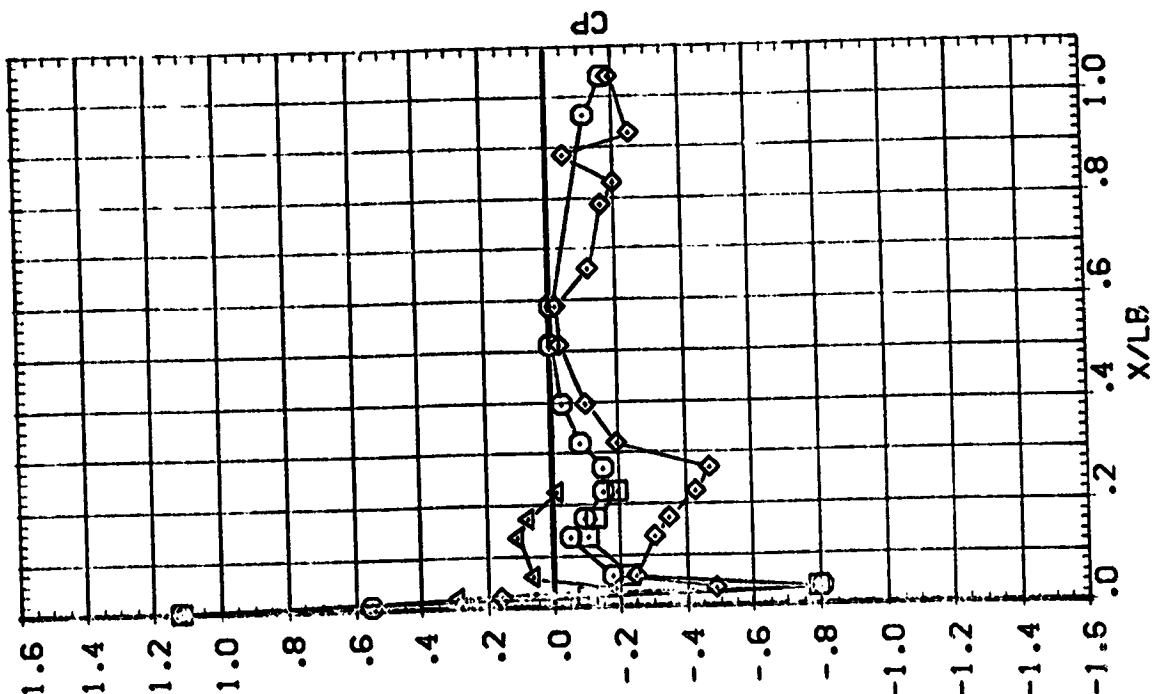
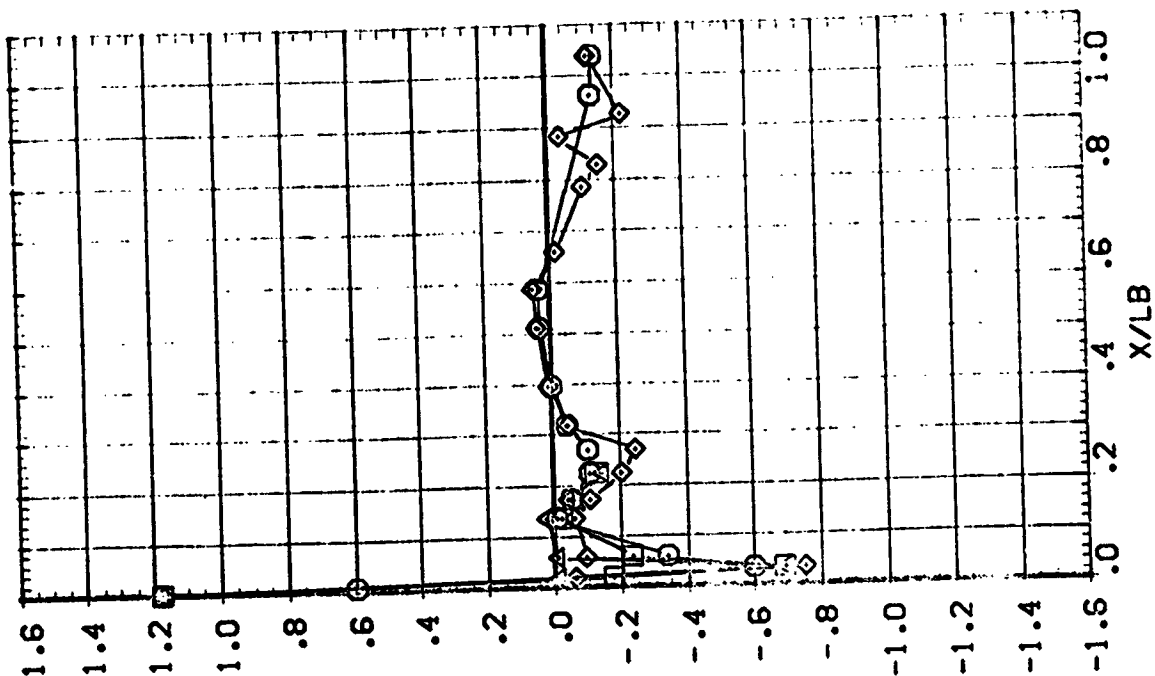
ORBITER FUSELAGE (RBPB:7)

AVES 11-707 GA12 C2A

SWGC-
 00000
 20.000
 40.000
 55.000

BETA MACH
 -10.120 .901
 .080

PARAMETRIC VALUES
 .000 .000 .000
 .000 .000 .000
 .000 .000 .000
 .000 .000 .000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES



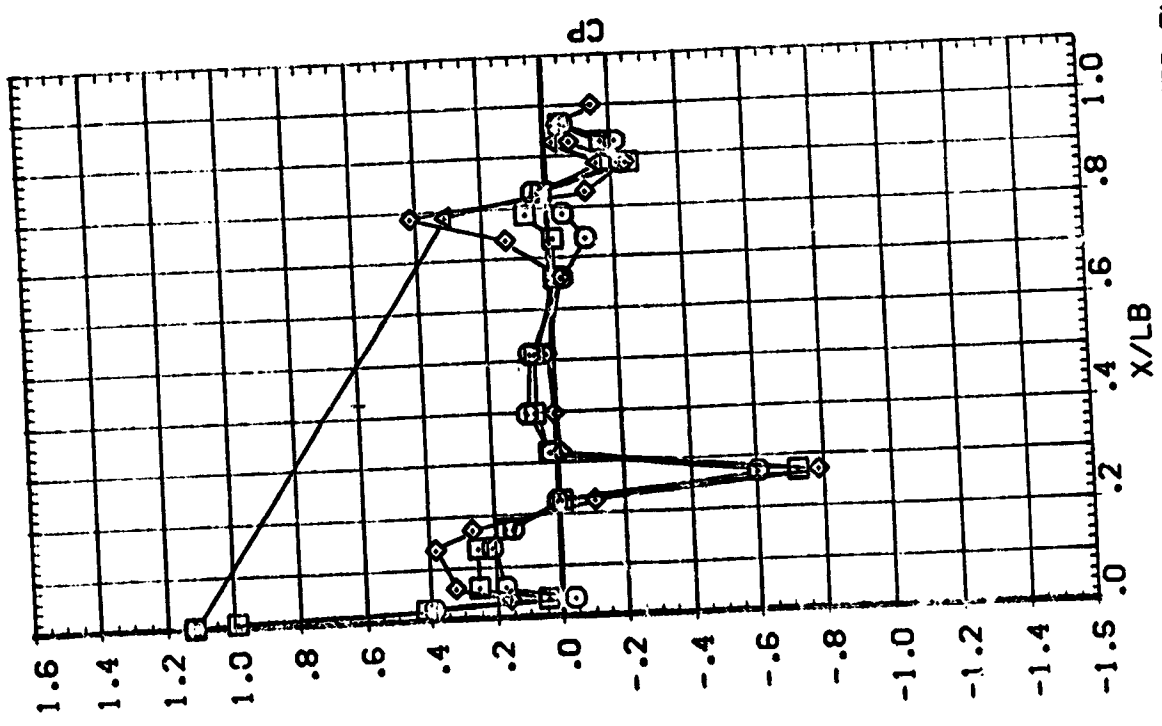
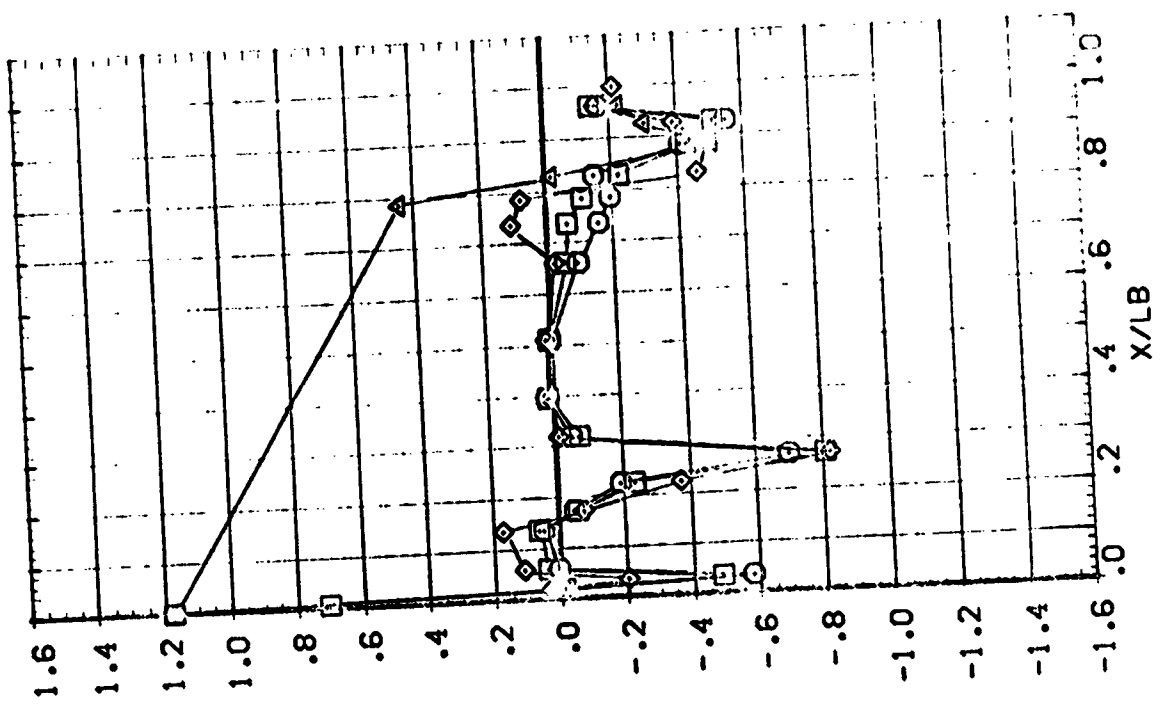
SVGZ
O
I
◇
△

PH: 70.000
90.000
120.000
135.000

BETA -10.120
.080

MACH .901

PARAMETRIC VALUES
ALPHA .000
ELEV 10.000
RUDDER .000
RUFPLR .000



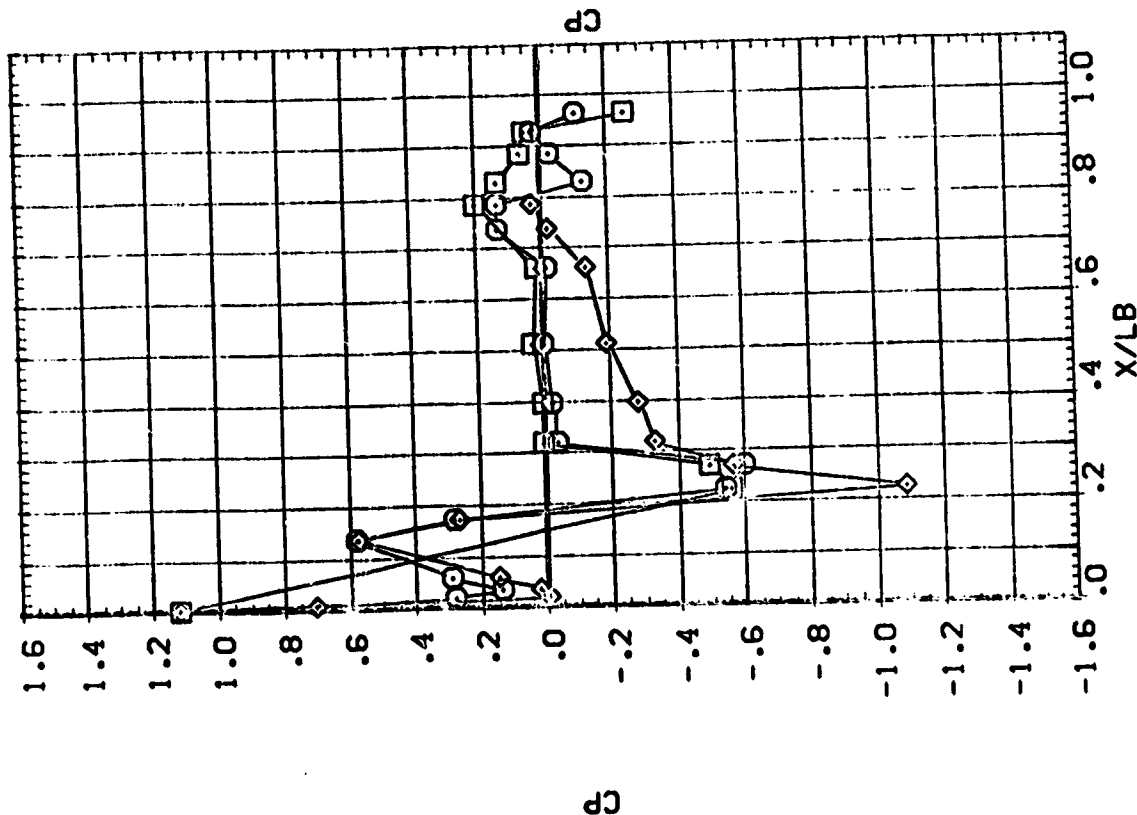
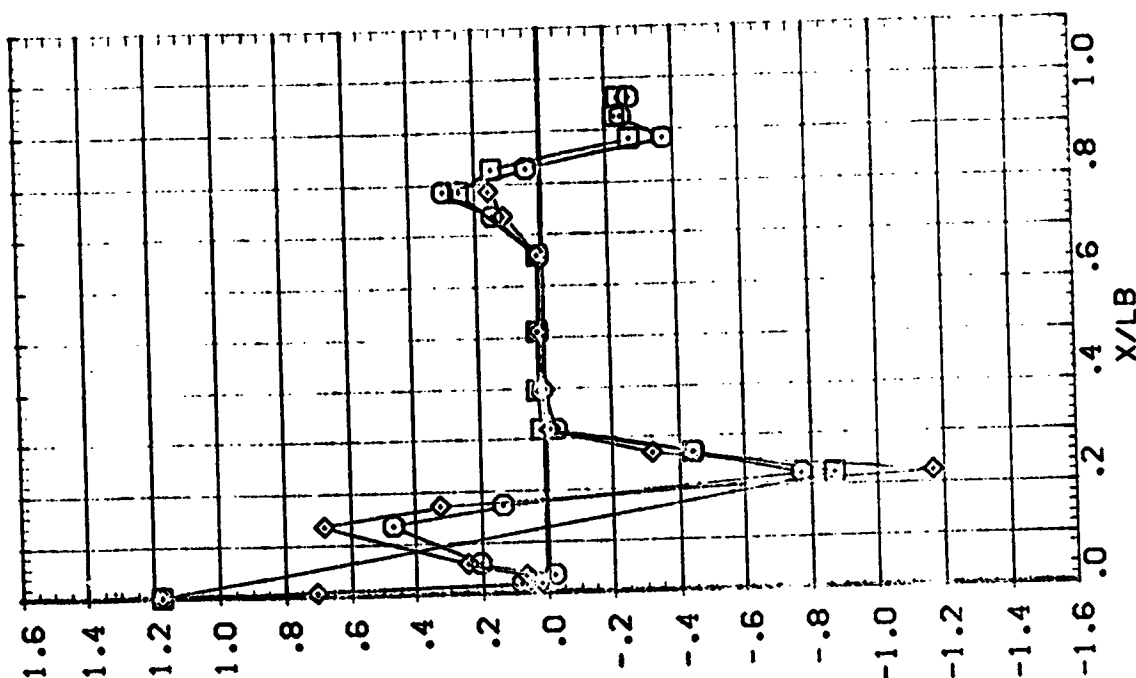
LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (R3P8:7)

AVES 11-707 0A12 02A

PARAMETRIC VALUES
 .000 .000 .000
 .000 .000 .000
 .000 .000 .000
 .000 .000 .000

DAI: BETA MACH
 :50.000 -10.120 .901
 :65.000 .080
 :80.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

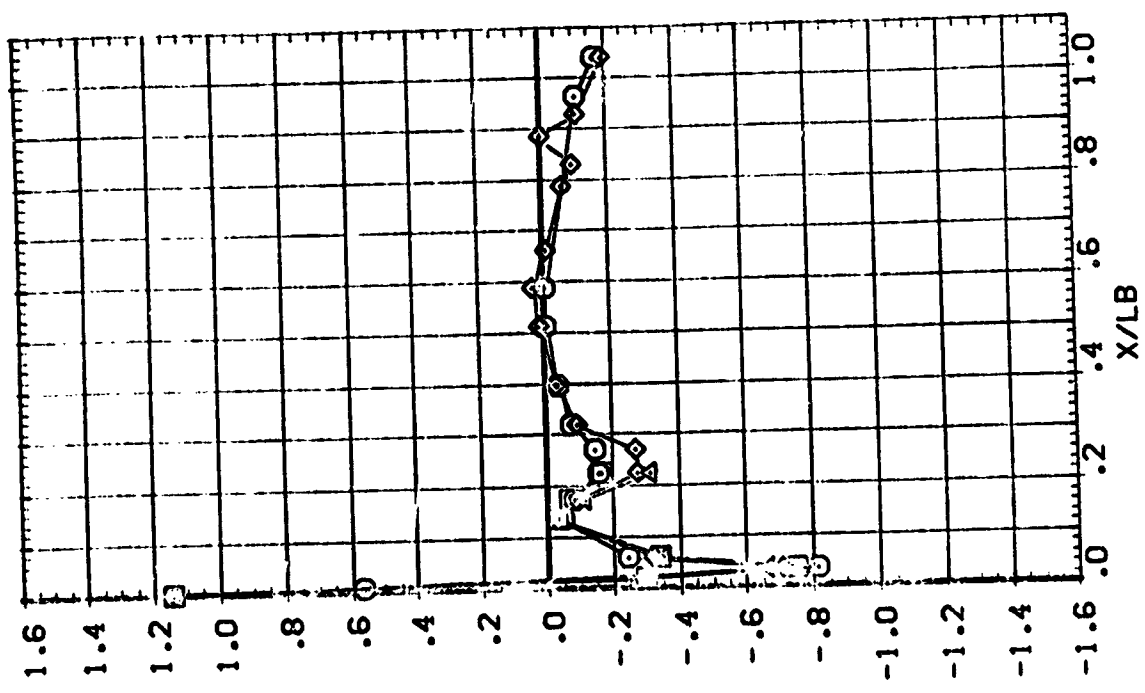
SVR-
11-707

B41 .000
20.000
40.000
55.000

BETA 10.420

MACH .903

PARAMETRIC VALUES
ALPHA .000
ELEVON 10.000
RUDDER .000
RUDLER .000

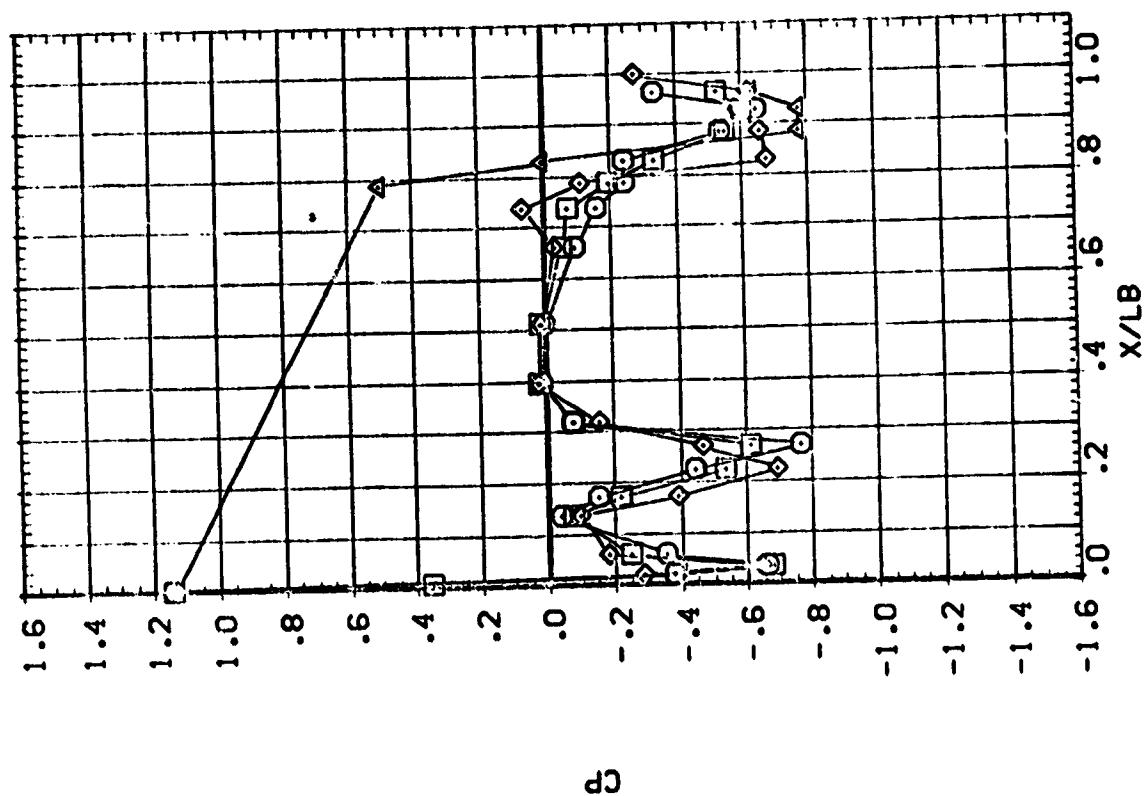


LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

AVES : 1-707 0A12 02A

PARAMETRIC VALUES		
ALPHA	.000	.000
ELEVON	10.000	.000

Symbol	Phi	Beta	Mach
()	75.000	10.490	.903
	50.000		
◇	20.000		
△	35.000		

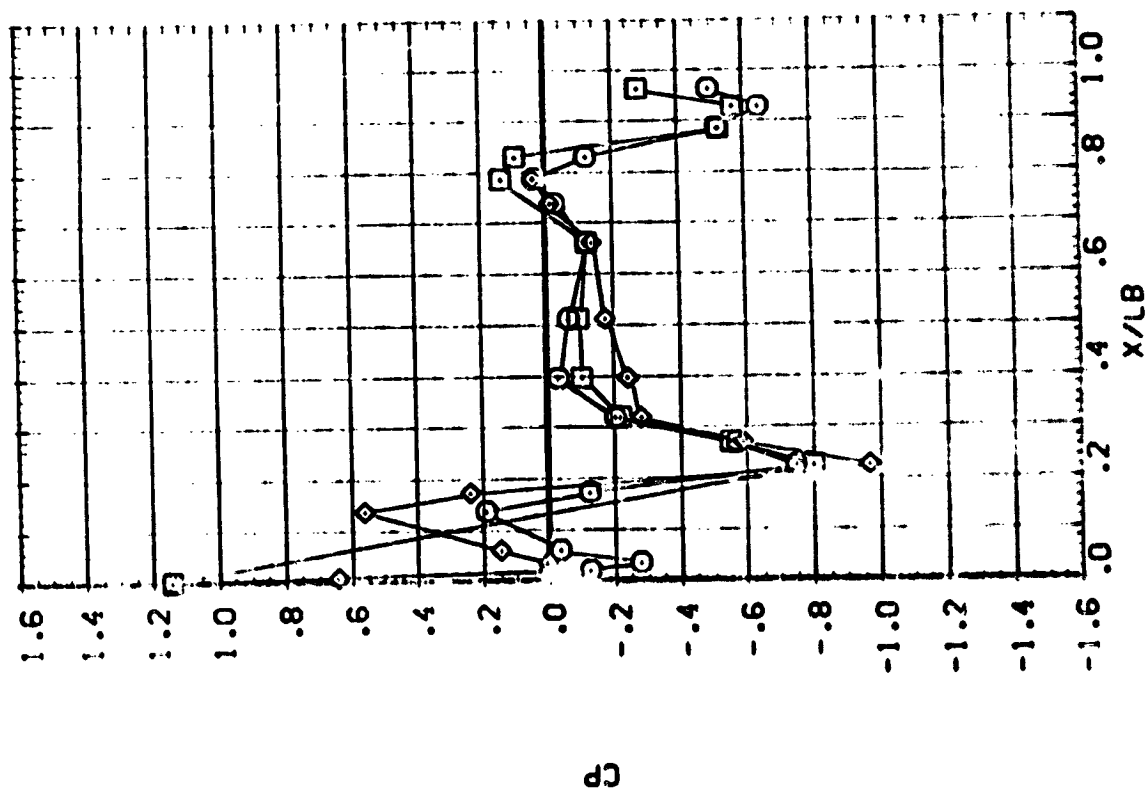


LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

3-avg.
150.000
150.000
150.000

BETA 10.480
MACH .933

PARAMETRIC VALUES
ALPHA .000
ELEVON 10.000
9.000
9.000
9.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

23

23

23

23

23

23

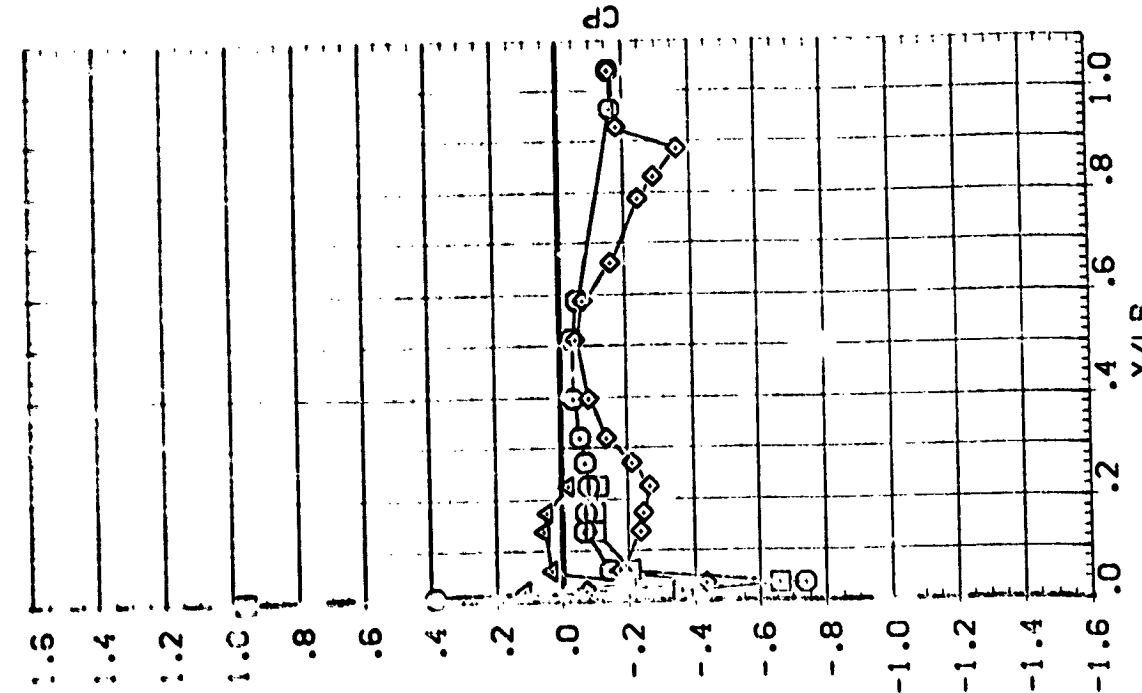
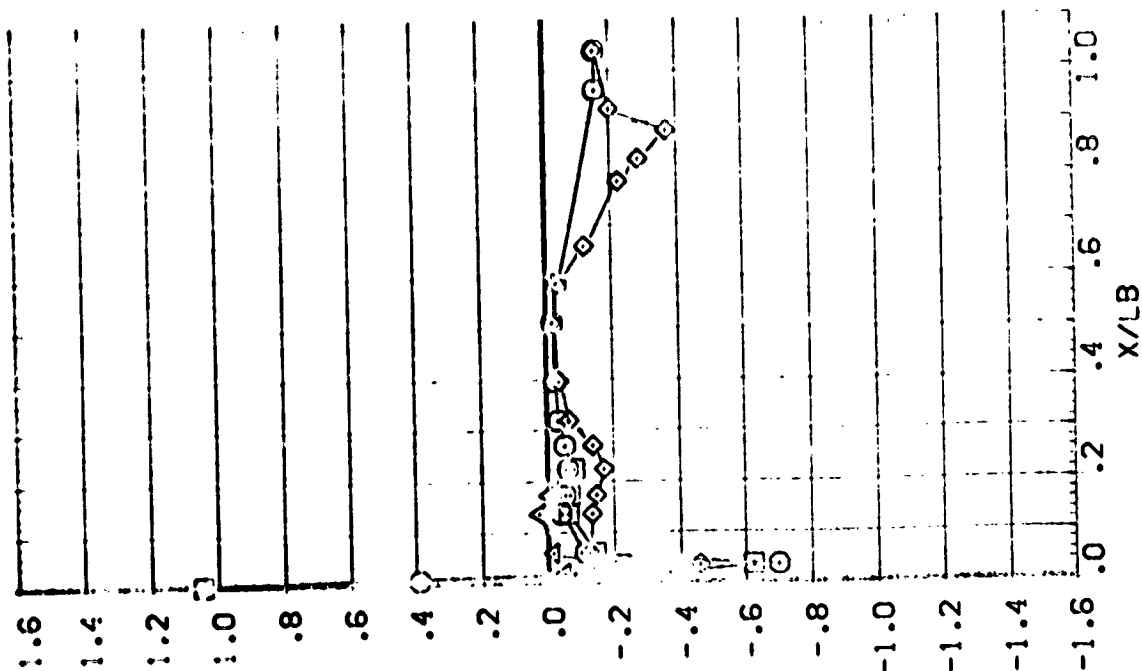
23

23

23

23

23



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

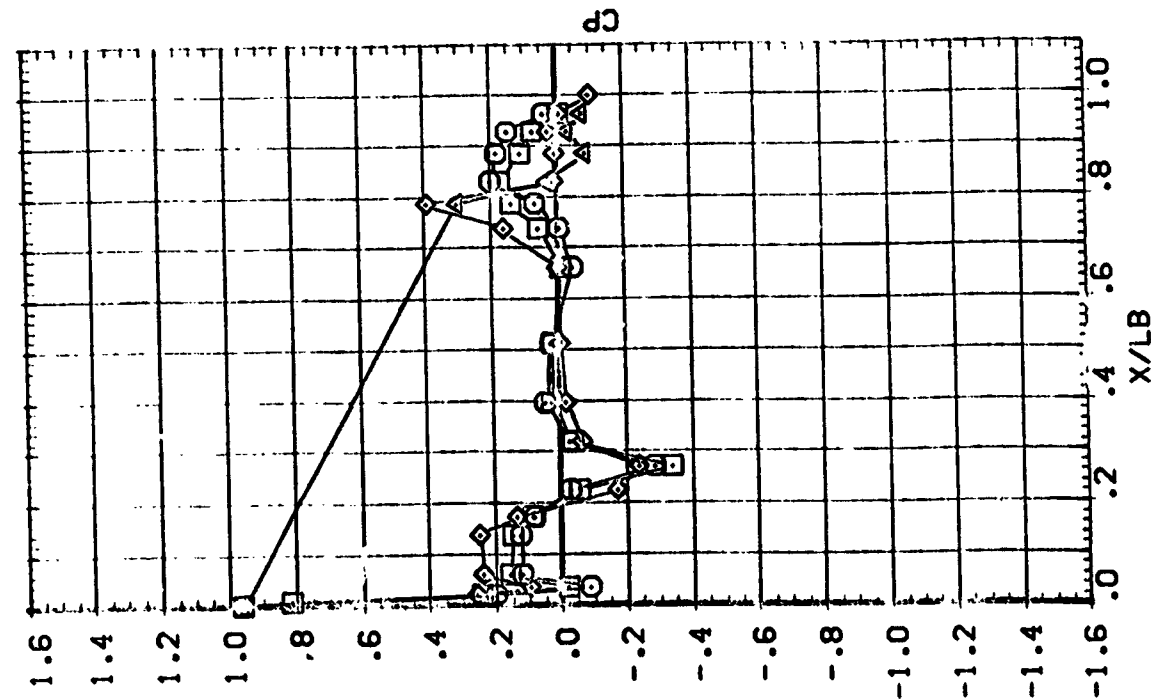
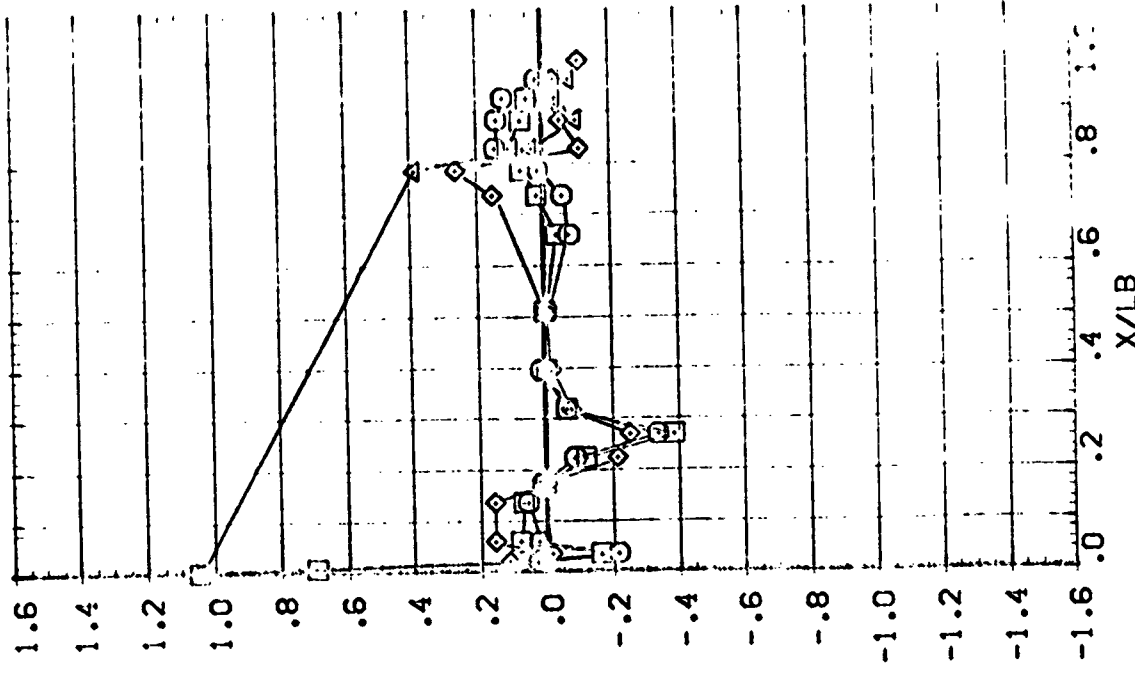
ALPHA
 ELEVON
 .000
 .000
 .000

SV93C
 PU1
 70.000
 90.000
 120.000
 135.000

BETA
 -7.972
 -3.942

MACH
 .598

.000
 .000
 .000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

WIND TUNNEL CASE 0211

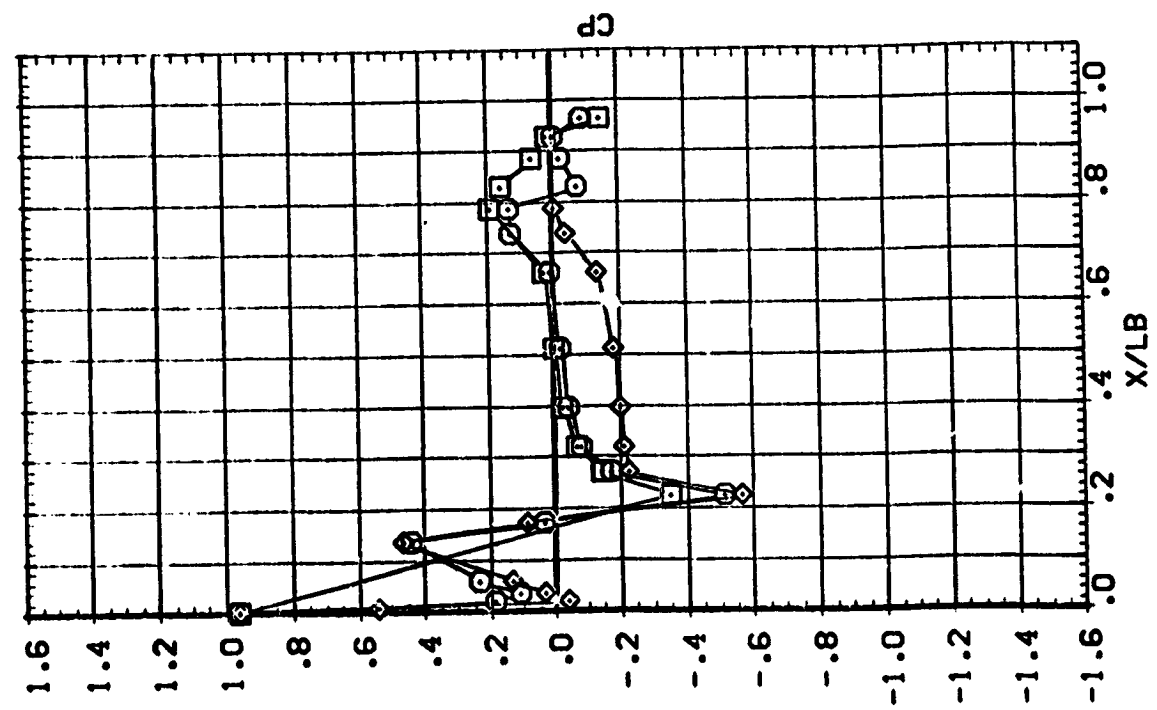
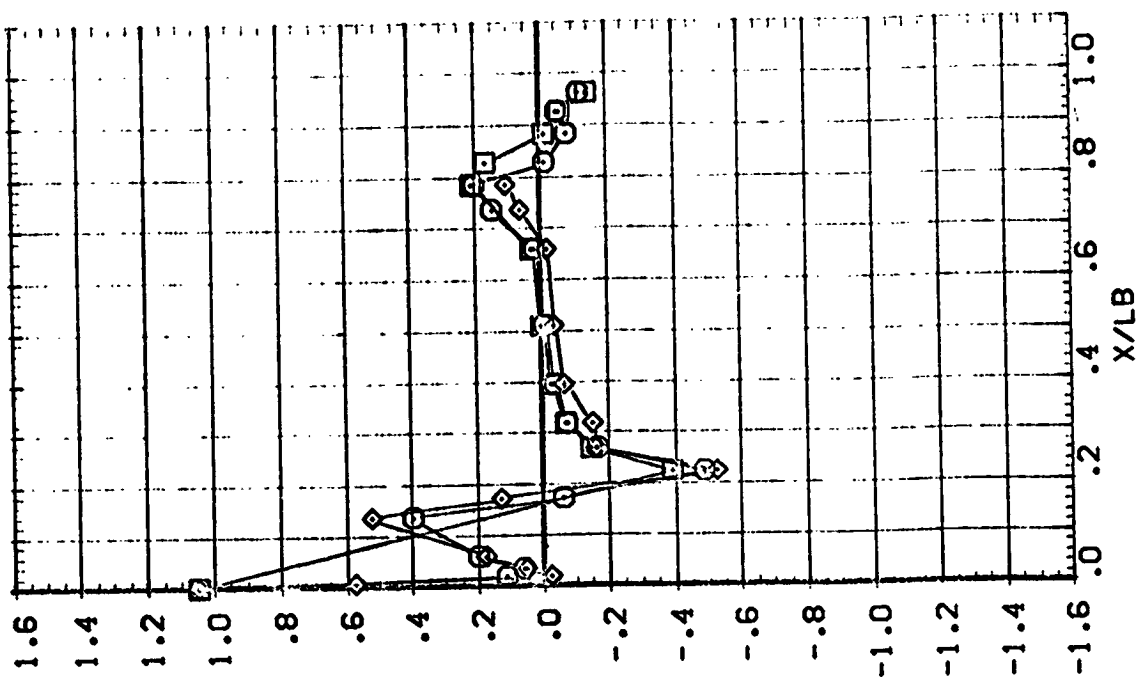
SYMBOL
 O
 ◇

PHI
 150.000
 165.000
 180.000

BETA
 -7.970
 -3.940

MACH
 .598

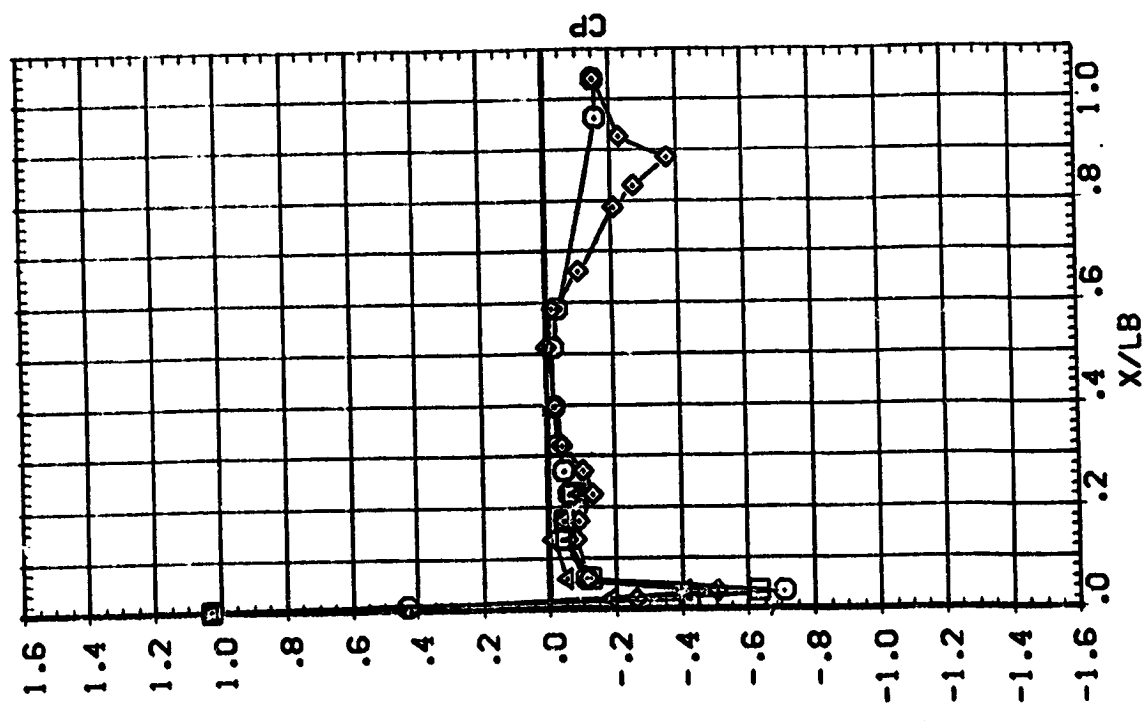
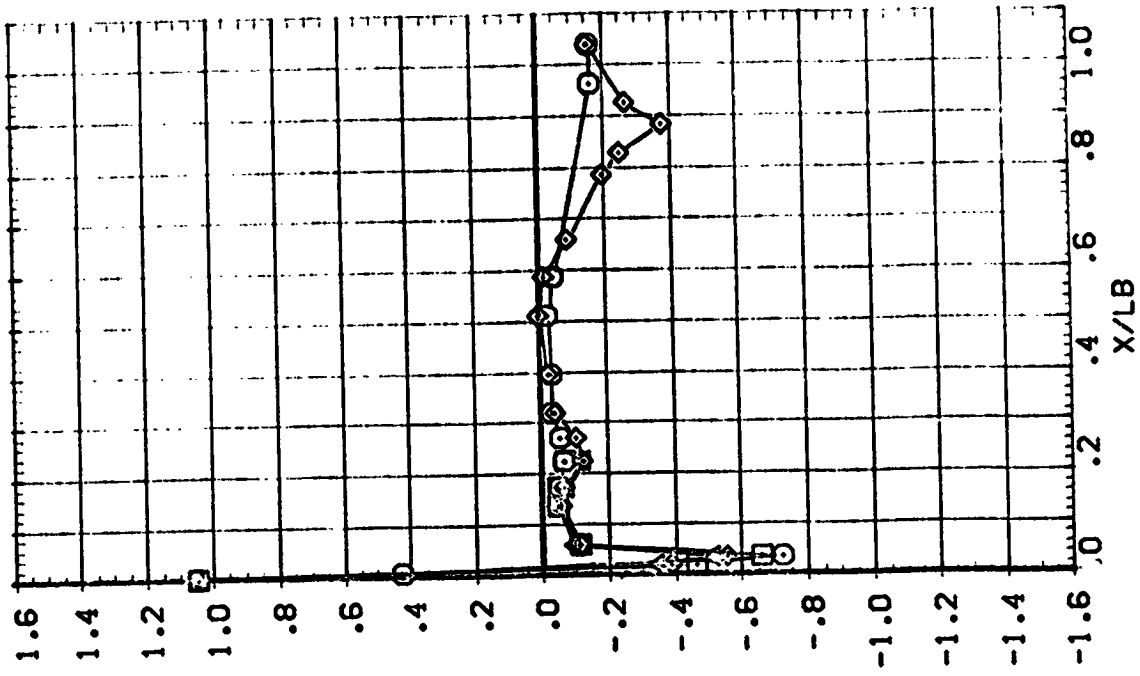
PARAMETRIC VALUES
 ALPHA
 ELEV
 .000
 .000
 -10.000
 RUDER
 RUDFLR
 .000
 .000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

STYKA Jini-INYA

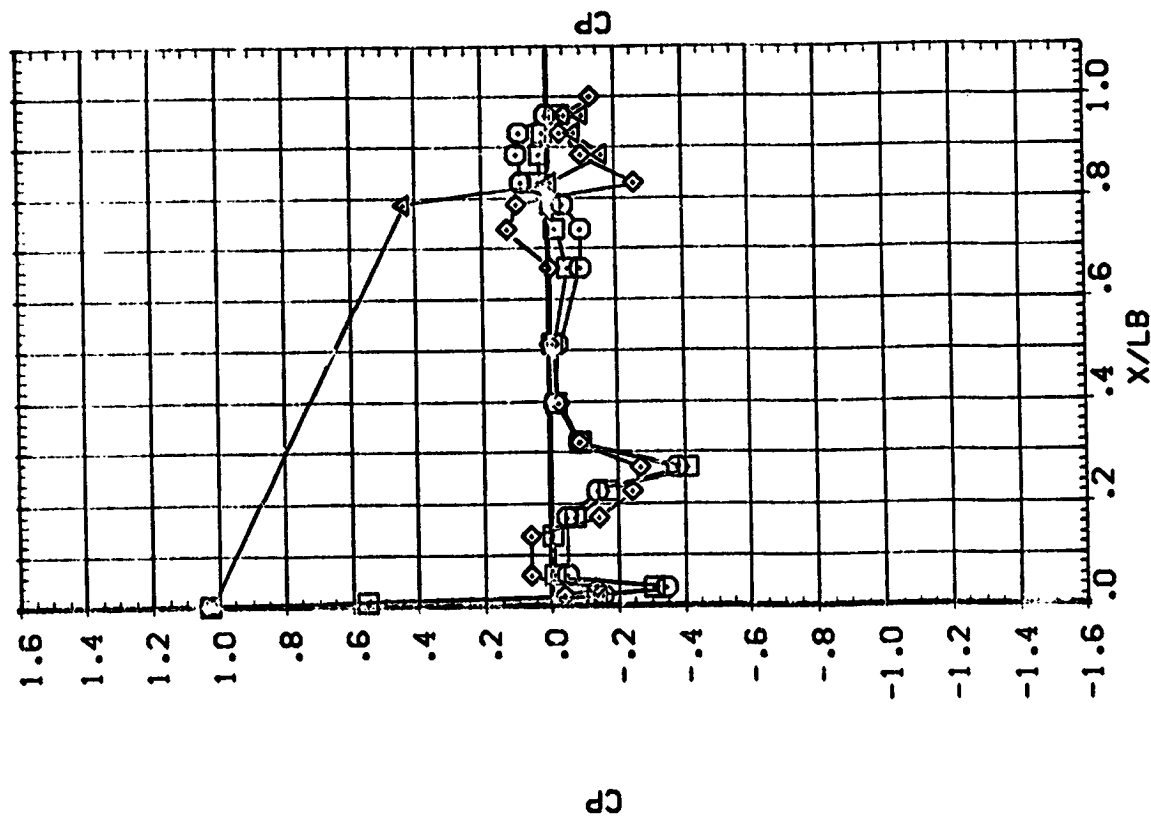
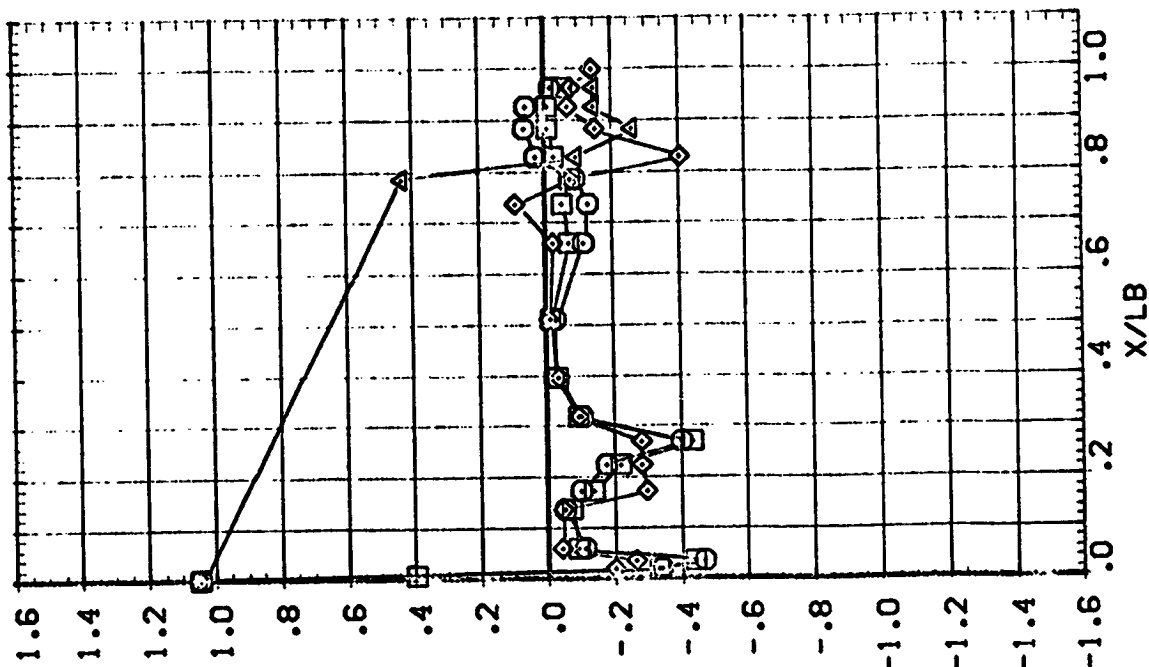
SYMBOL	P-1	BETA	MACH
○	.000	.080	.597
□	20.000	4.200	
◇	40.000		
△	55.000		



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

PARAMETRIC VALUES
 ALPHA .000 RUDFR .000
 ELEVON -10.000 RUDFLR .000

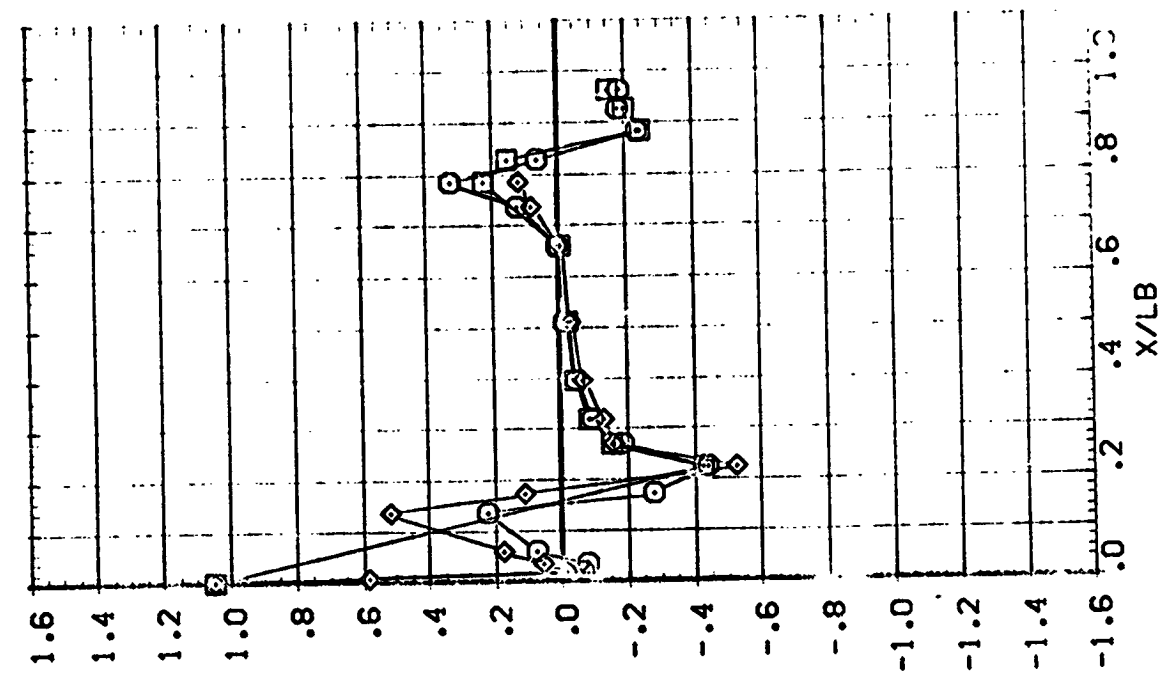
SV3C
 PH: 70.000 MACH .597
 BETA .080
 90.000 4.200
 120.000
 135.000



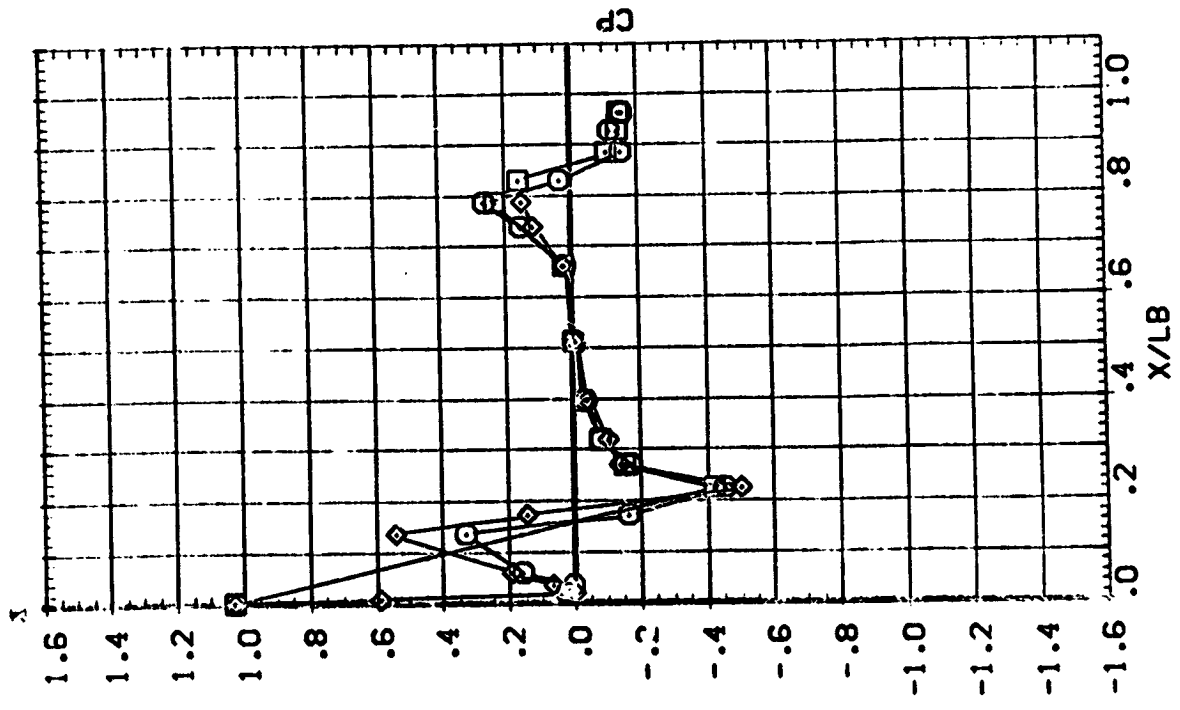
LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

A.B.A
 ELE/CN
 -10.000
 .000
 RUFPLR
 .000

PAGE 117



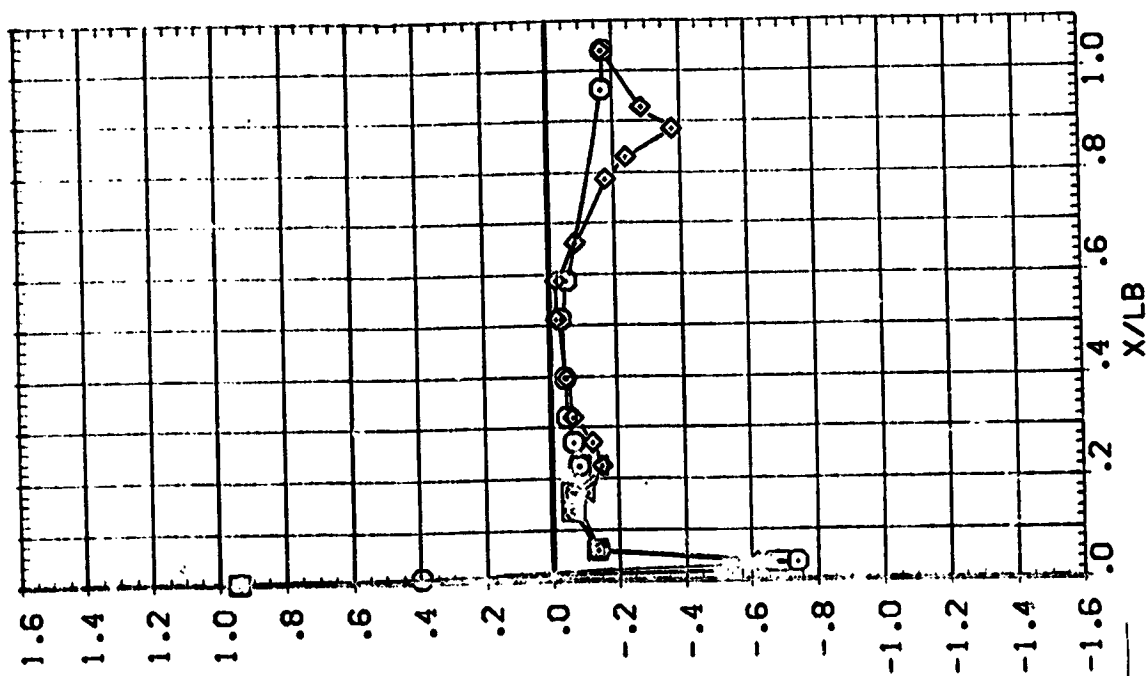
150.000
 165.000
 180.000
 .080
 4.200
 .597



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

PARAMETRIC VALUES
 ALPHA .000
 ELEVATION -10.000
 RADIUS .000

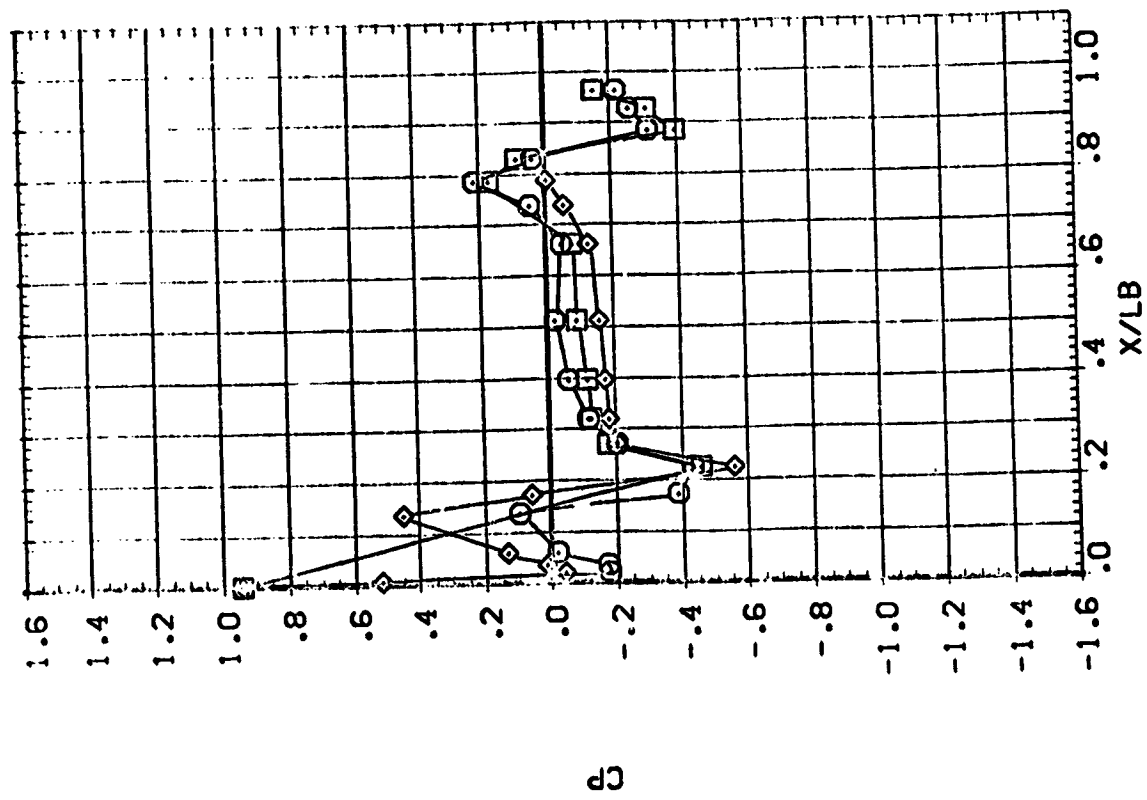
SVISC-
 PH: .000
 20.000
 40.000
 55.000
 BETA 8.300
 MACH .597



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

PARAMETRIC VALUES
ALPHA .000
ELEVON .000
RUF 9.000
RUF 9.000
RUF 9.000

BETA 8.300
MACH .587
SVS2C-
150.000
165.000
180.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

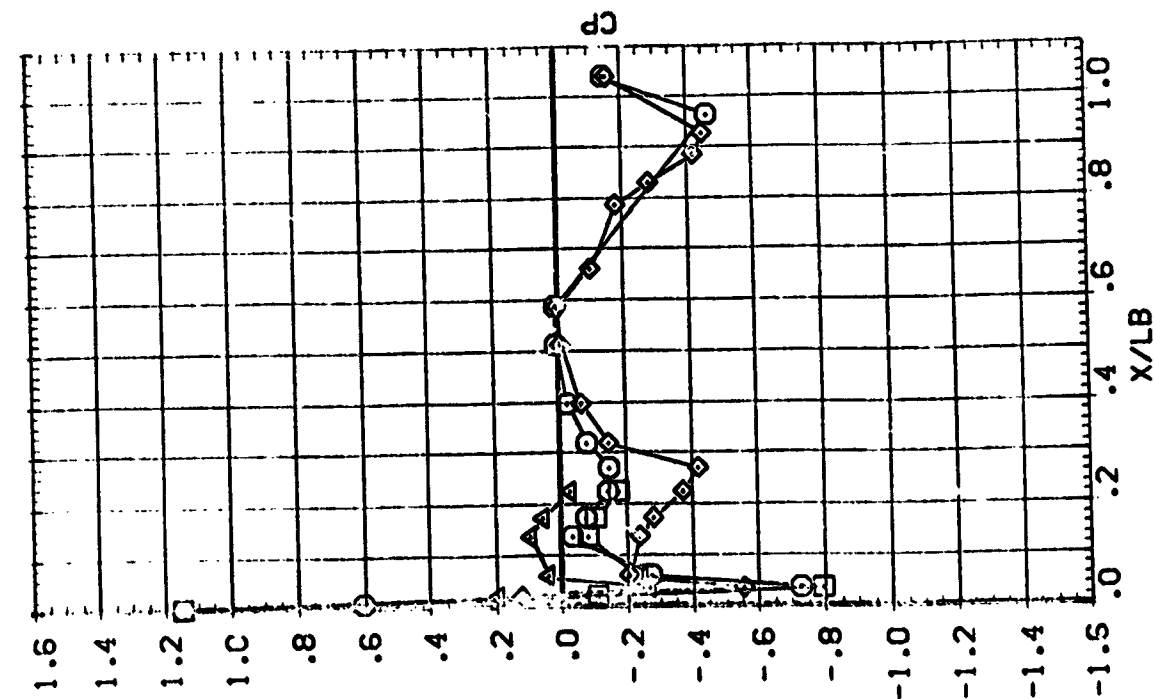
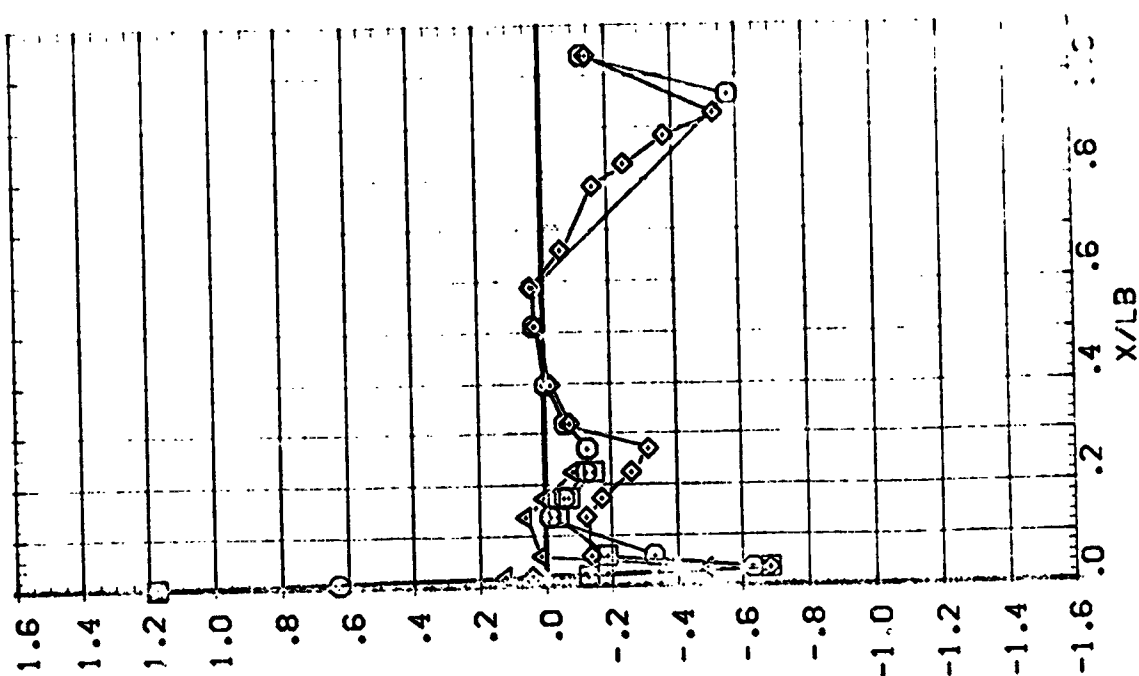
SVGC
O
I
◇
△

DU: 1.000
20.000
40.000
55.000

BETA -8.090
-4.000

MACH .904

PARAMETRIC VALUES
ALPHA .000
ELEVON -10.000

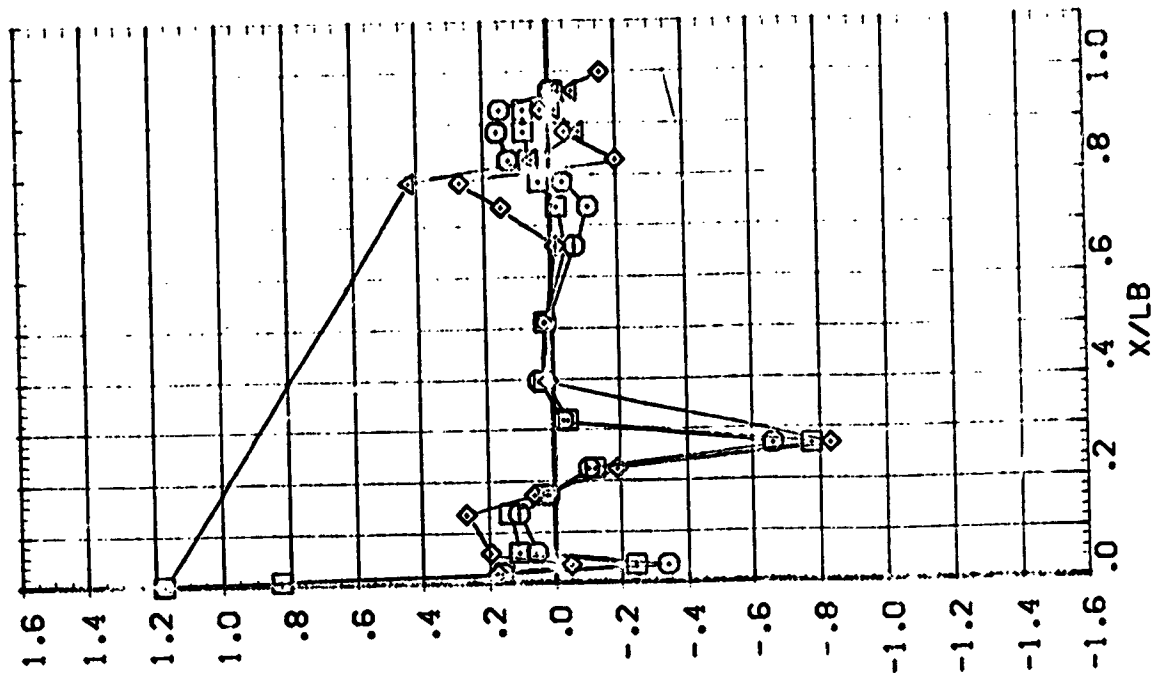
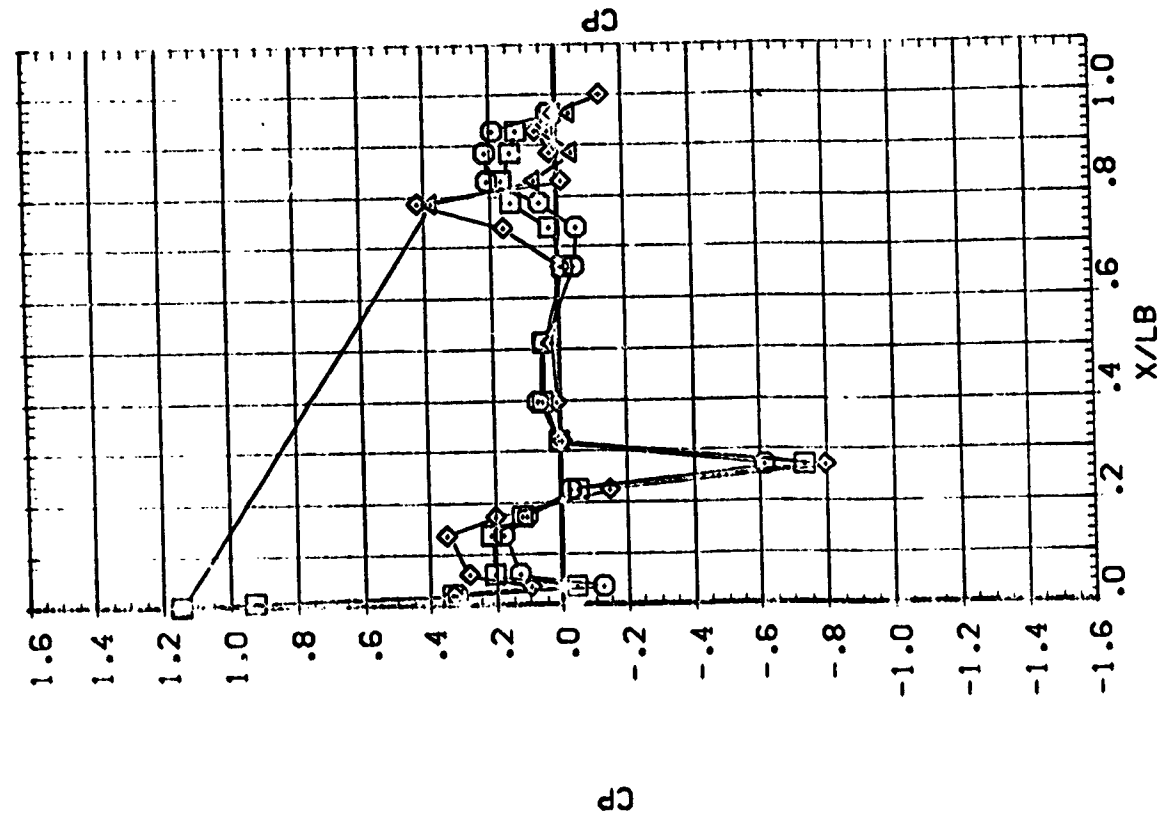


LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

SVVC-
 ()
 ()
 ()
 ()

BETA MACH
 70.000 -8.000
 90.000 -4.000
 120.000
 150.000

PARAMETRIC VALUES
 ALPHA .000
 ELEVON -10.000
 RUDDER .000
 RUFLR .000

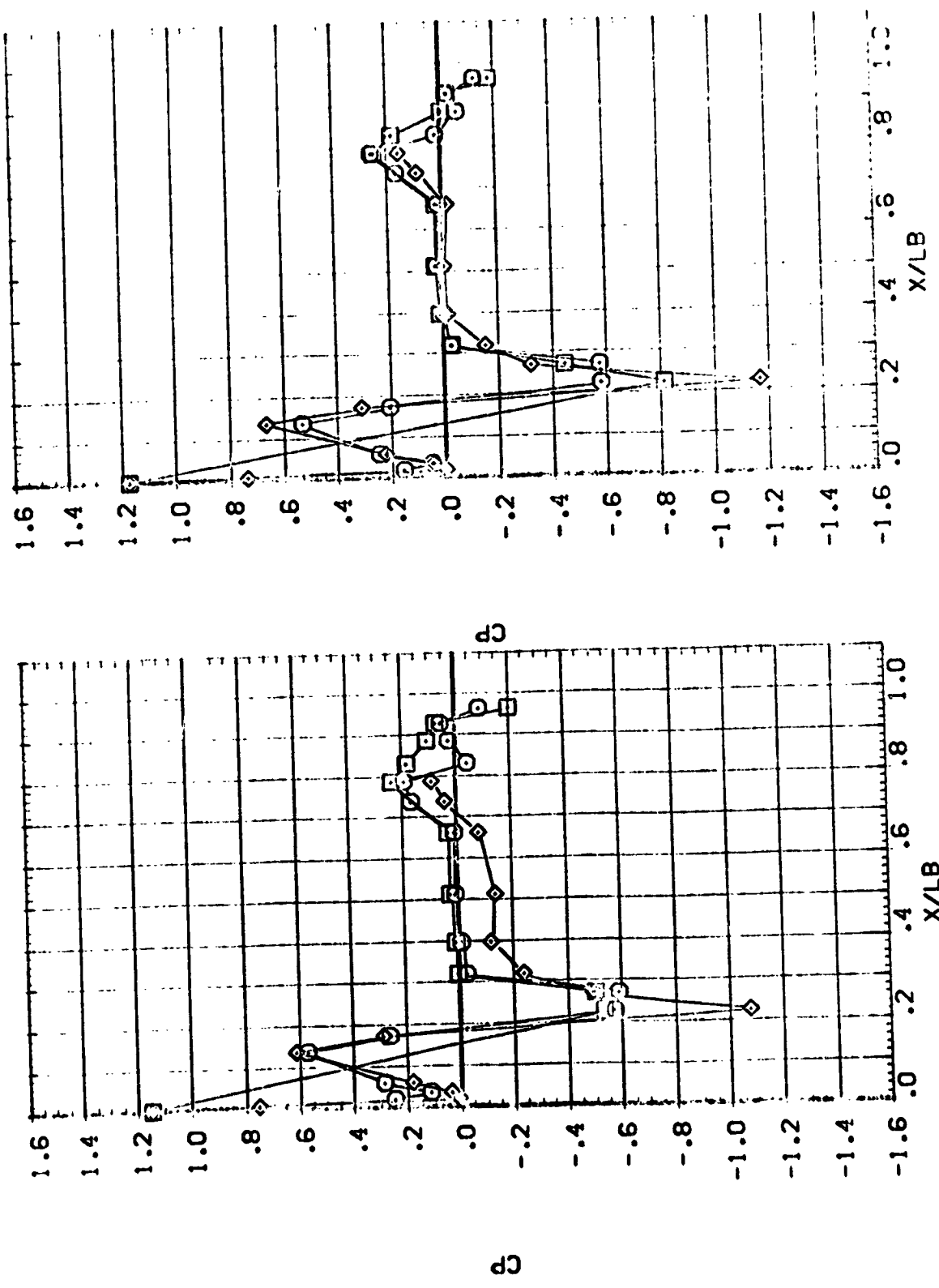


LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

SWBC
 152.000
 165.000
 180.000

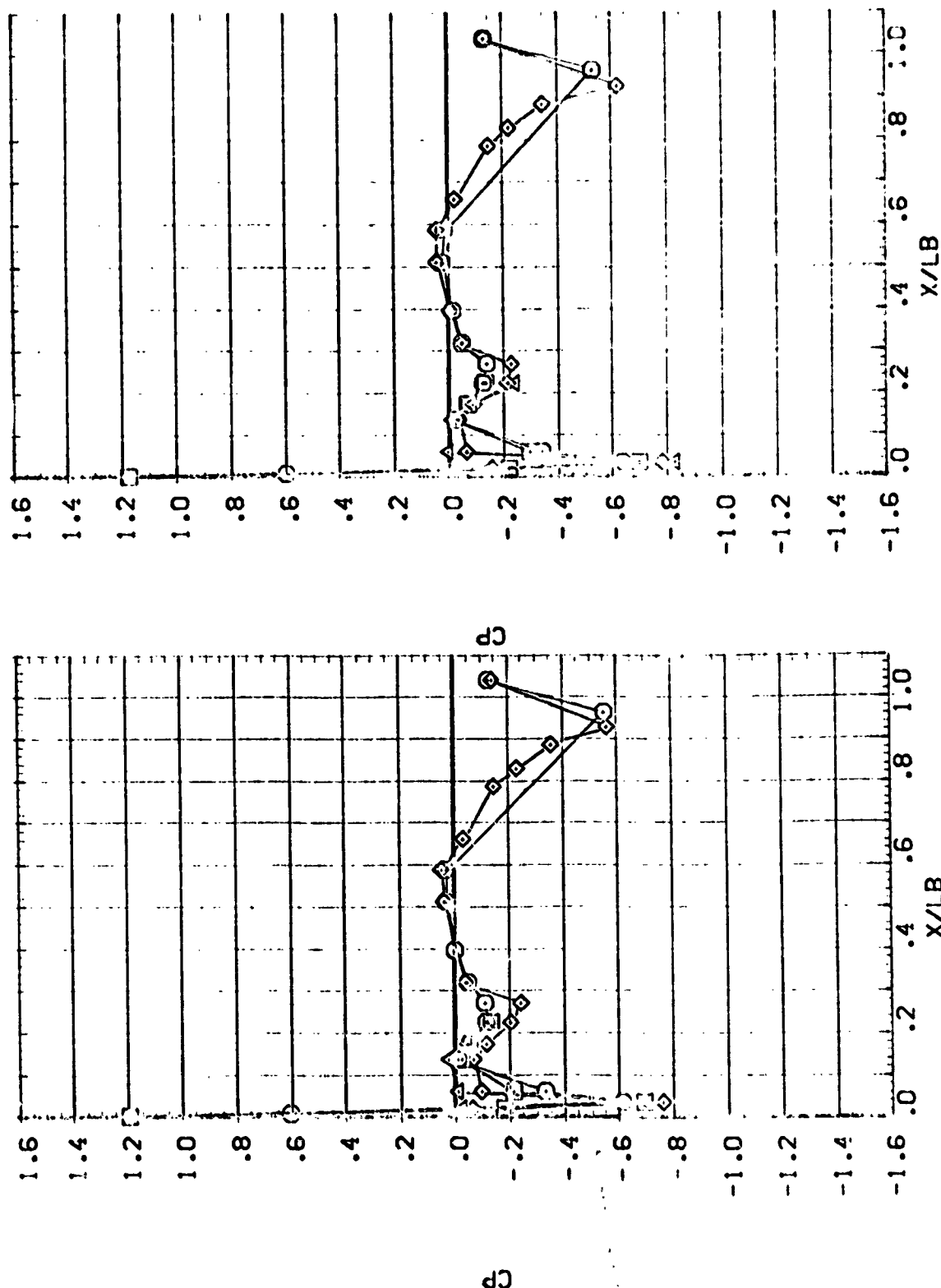
BETA MACH
 -8.000 .904
 -4.000

PARAMETRIC VALUES
 ALPHA .000
 ELEVON -10.000
 RUDER .000
 .000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

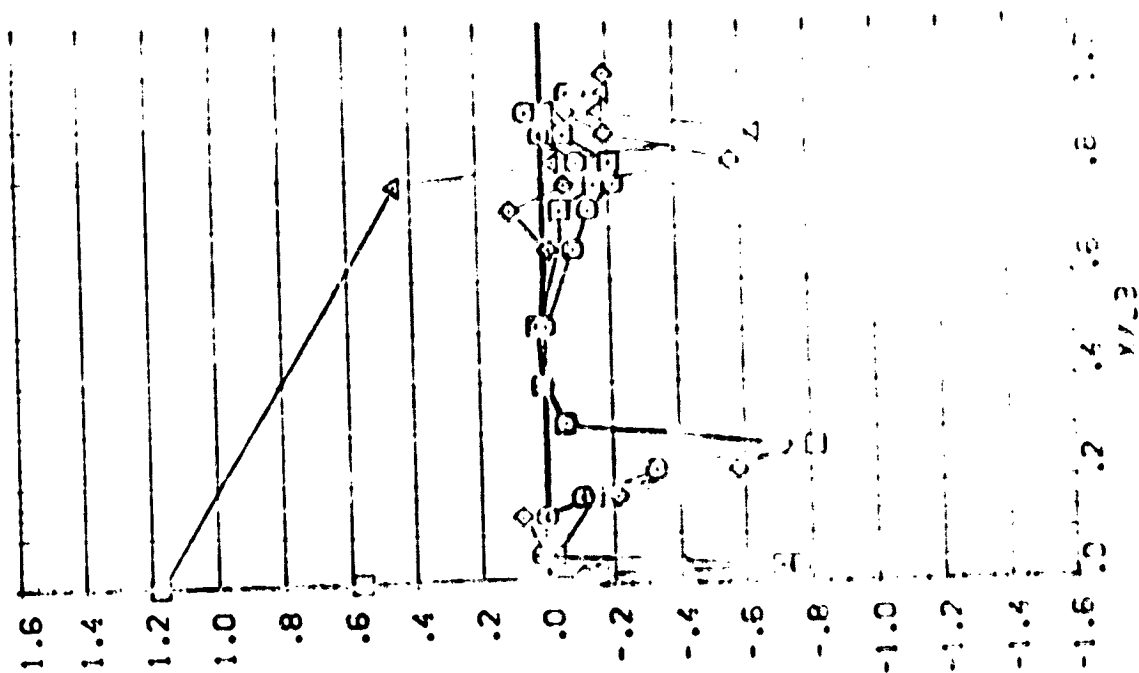
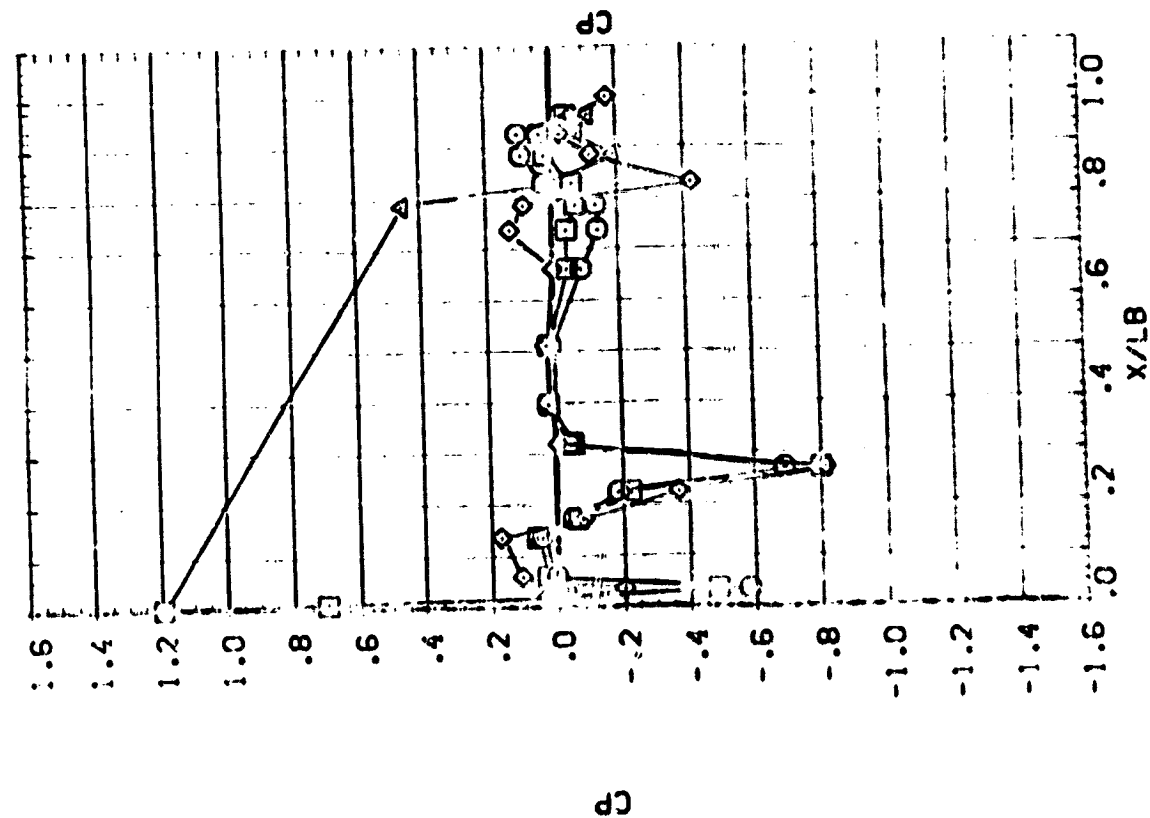
ALPHA	.000	20000
ELEVON	-10.000	20000
S. PAVEZIC VALUES		
	.000	20000
	.000	20000
	.000	20000

[illegible]

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

AVES :-707 3A:2 02A

SECRET
NOV 1963

[illegible]

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

SECRET

225

[illegible]

4. 33. 1

33.

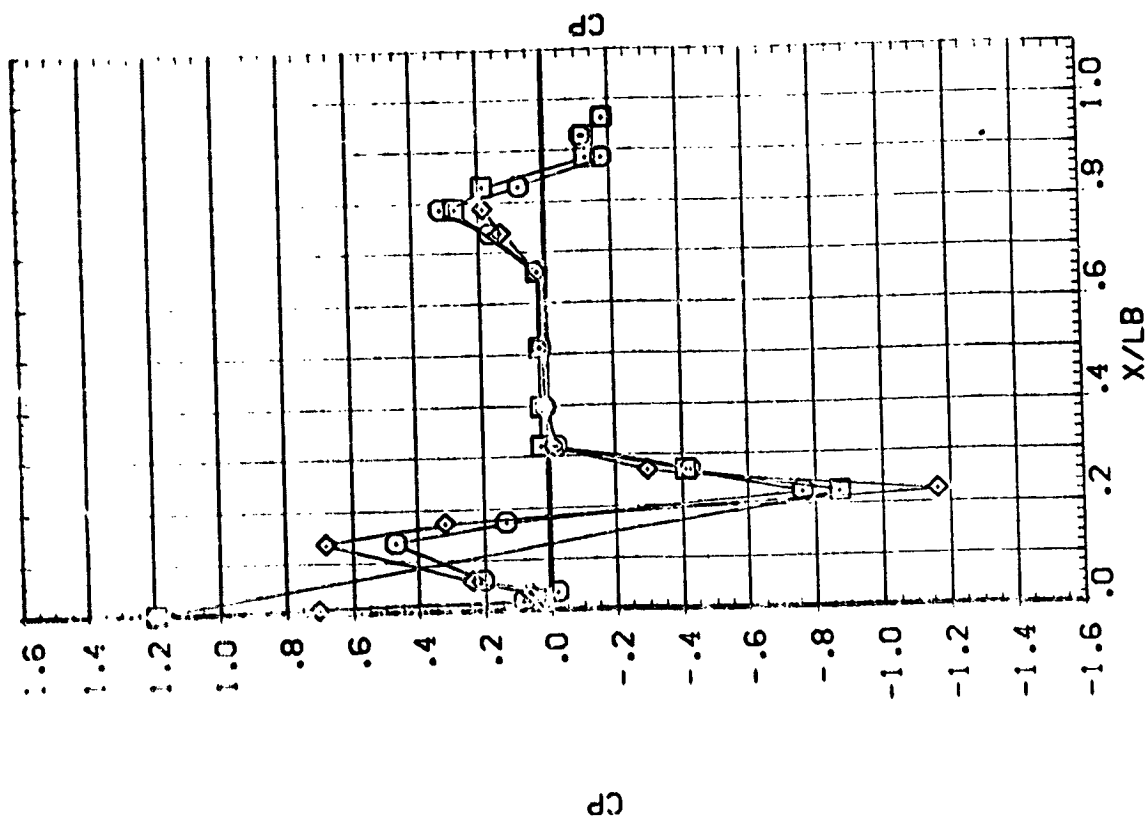
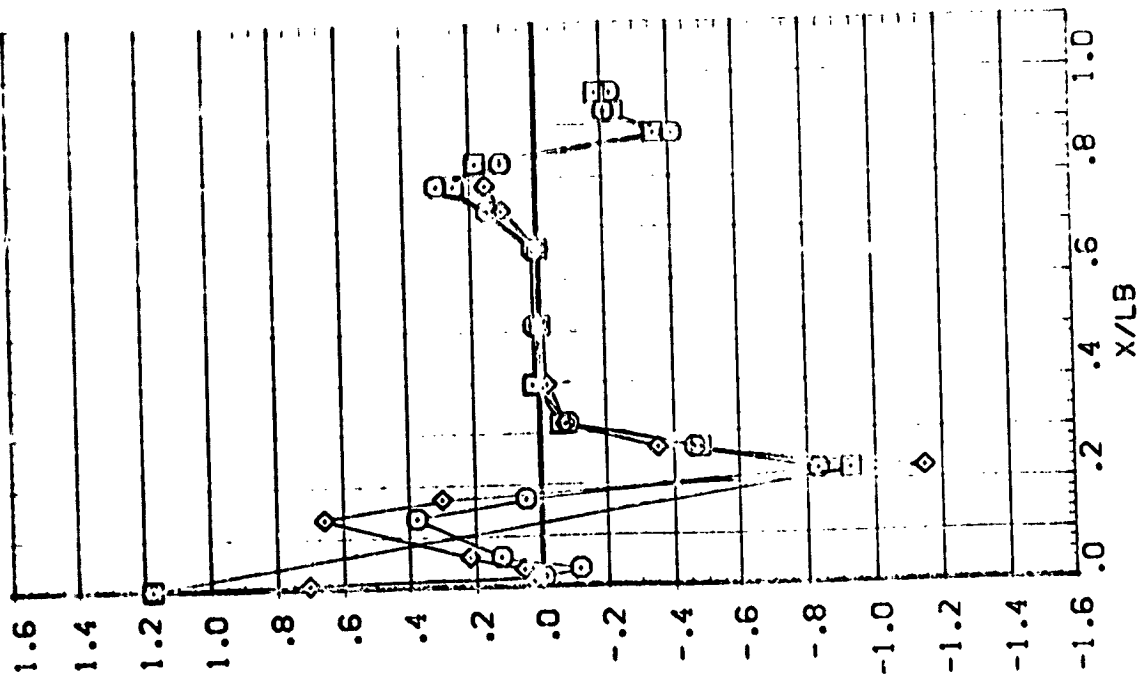
1

•

4 3 2 1

10

• • • •

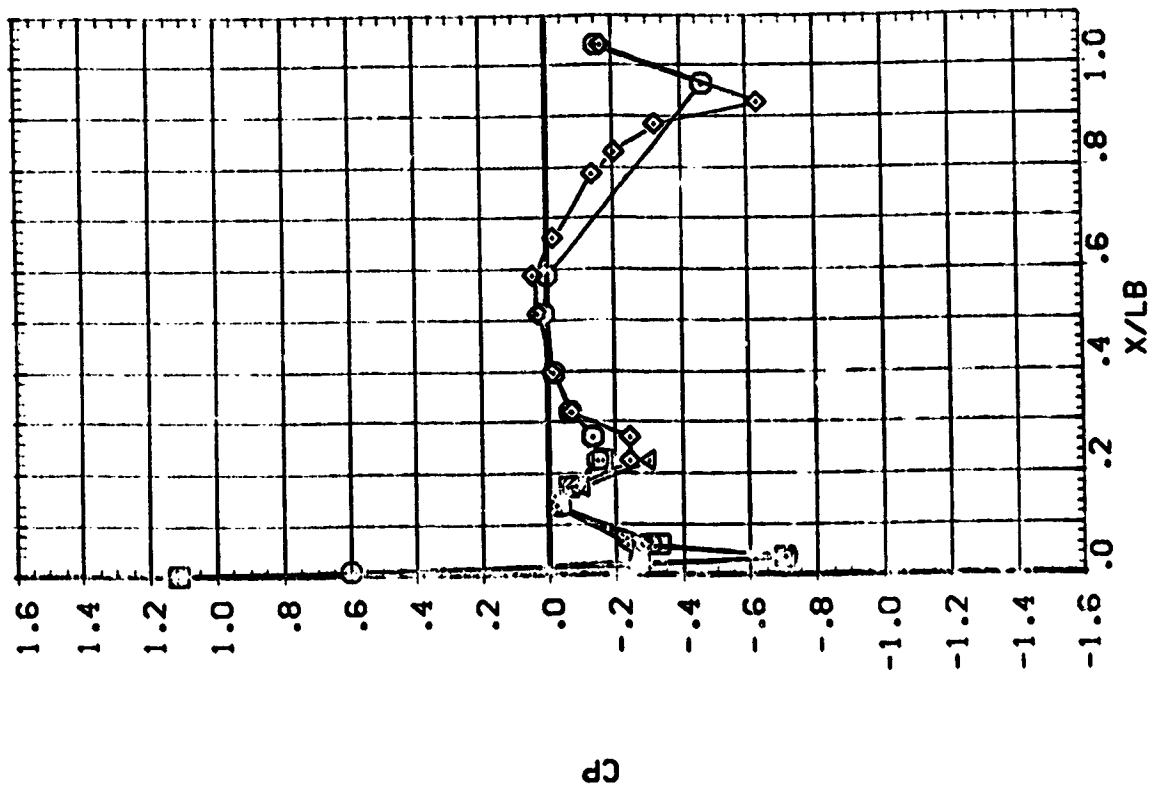


PARAMETRIC VALUES
 .000 RUDDER
 .000 RUDDER
 -10.000 RUDFLR

SVSC: 1.000
 20.000
 40.000
 55.000

PH: 1.000
 20.000
 40.000
 55.000

BETA 8.410
 WACH .900



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES



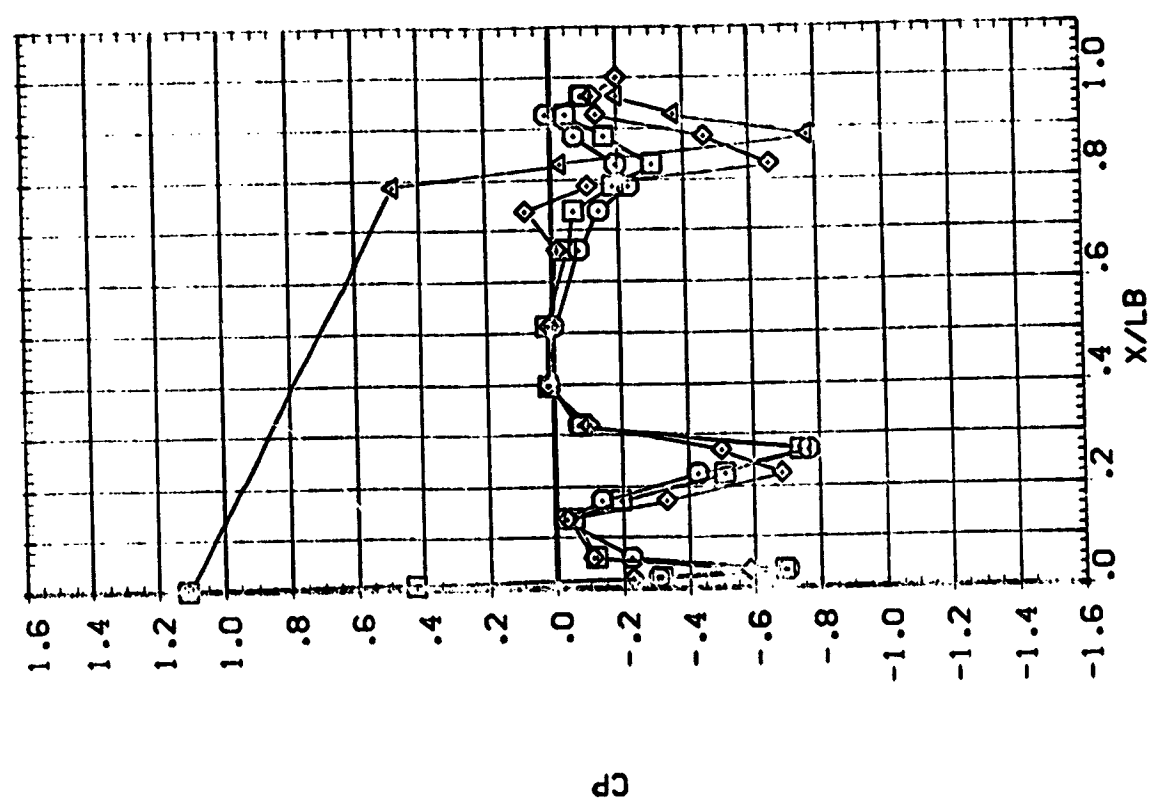
AVES 11-707 0A12 C2A ORBITER FUSELAGE (R8P922)

SVES:
□
◇
△

PL: 70.000
90.000
120.000
135.000

BETA 8.410
MACH .900

PARAMETRIC VALUES
ALPHA .000
ELEVON -10.000
RUDDER .000
RUDELR .000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

CRB: ER USE AGE (RBP322)

AVES :-7C7 3A12 02A

100-3645

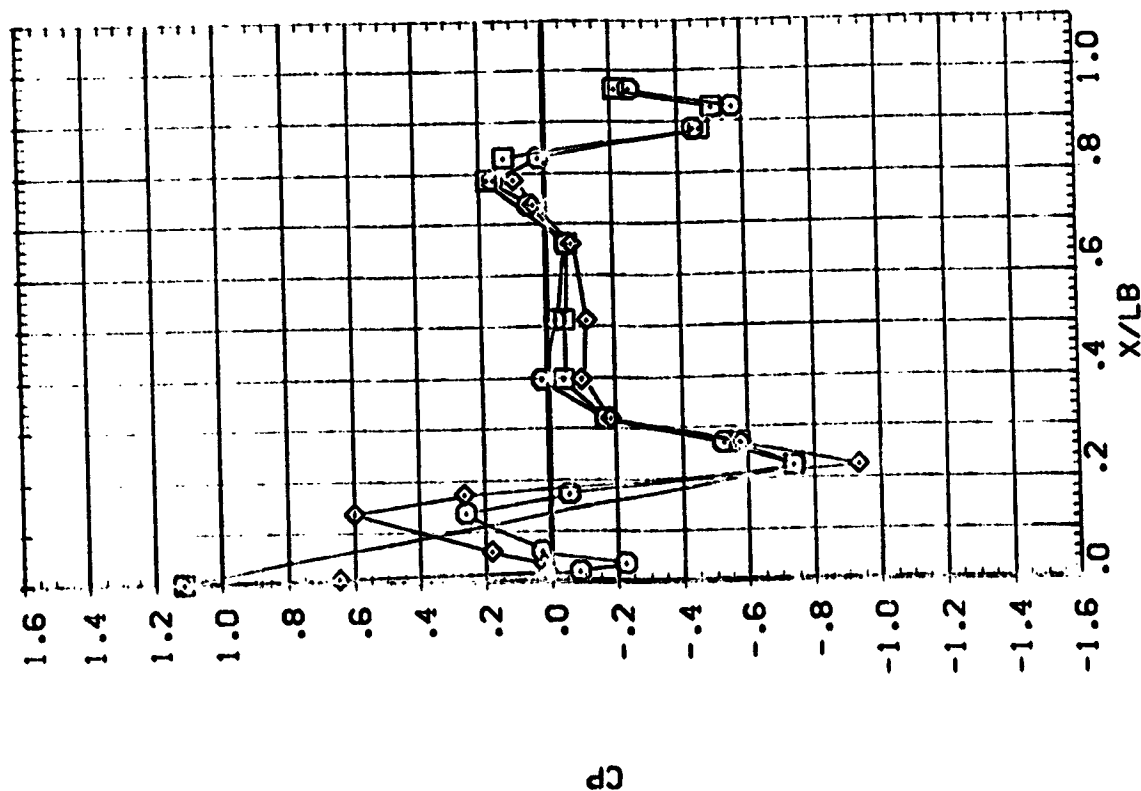
١٠٠

006
H-24

IC-2

ALBANY
NEW YORK

SER. S.E. JARVA



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

333

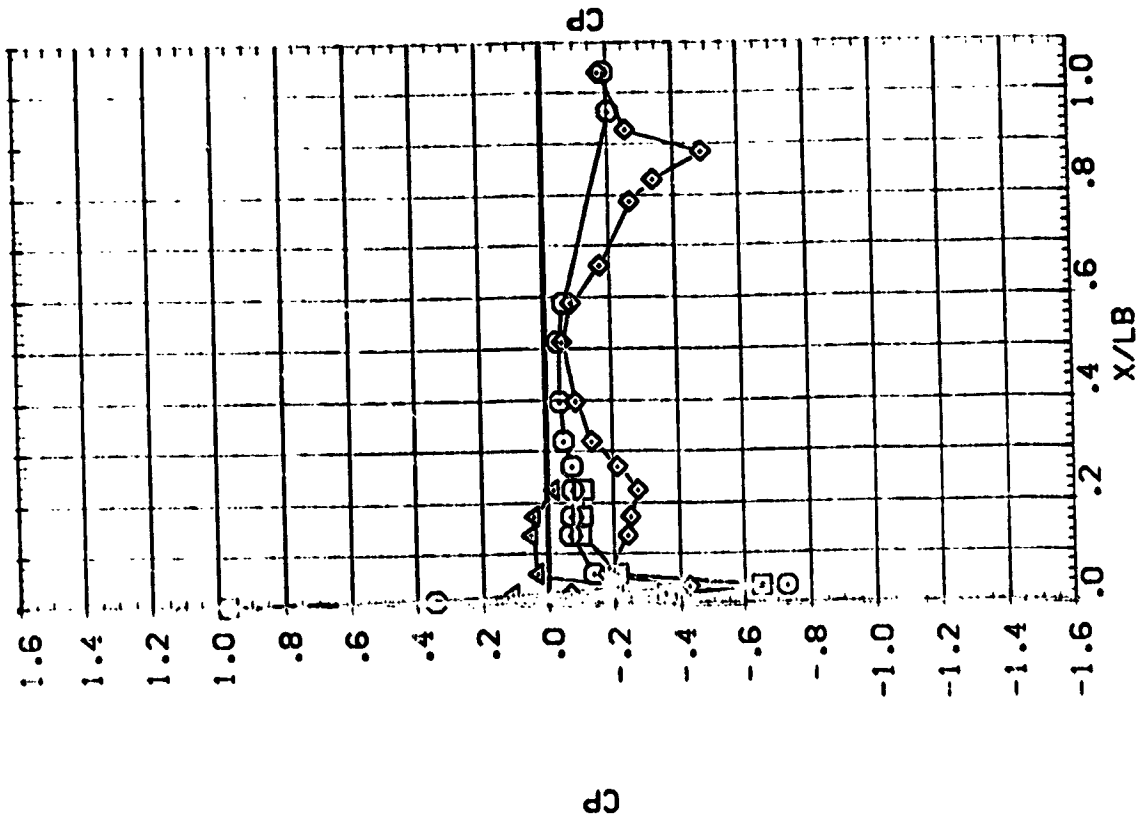
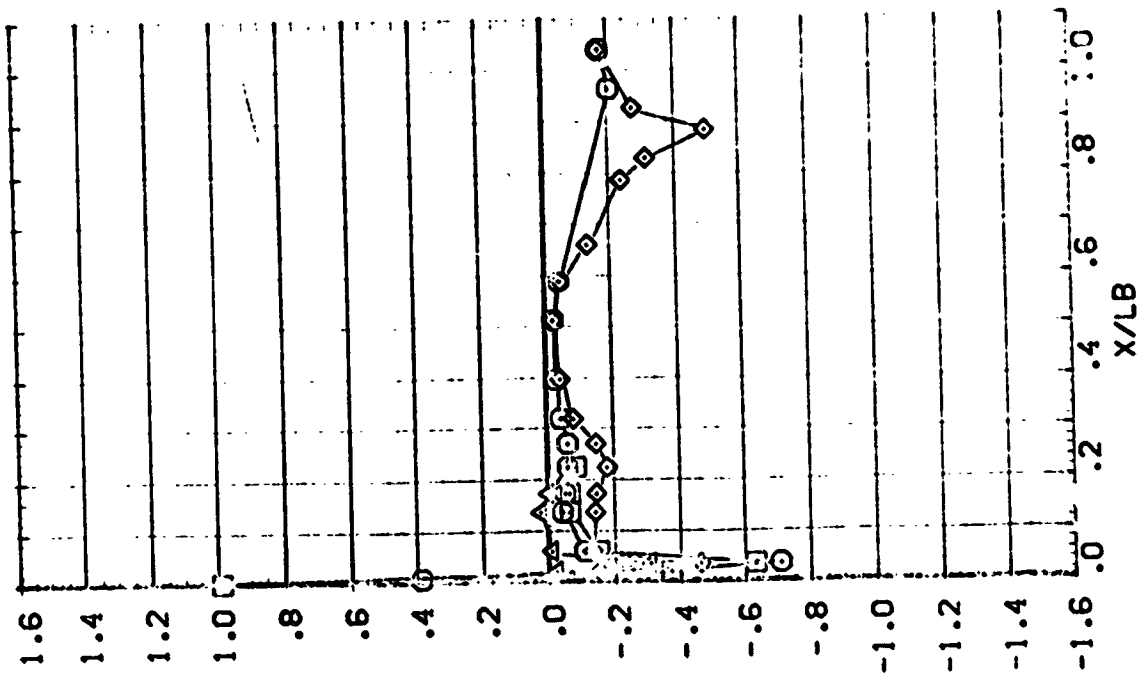
ORBITER FUSELAGE (R3P328)

A.2.4
 ELEVATION
 -20.000
 9.000
 9.000
 9.000

C2A

AVE 11-707 0A12
 BETA
 -7.970
 -3.940

S.W.2.
 0.000
 20.000
 40.000
 60.000



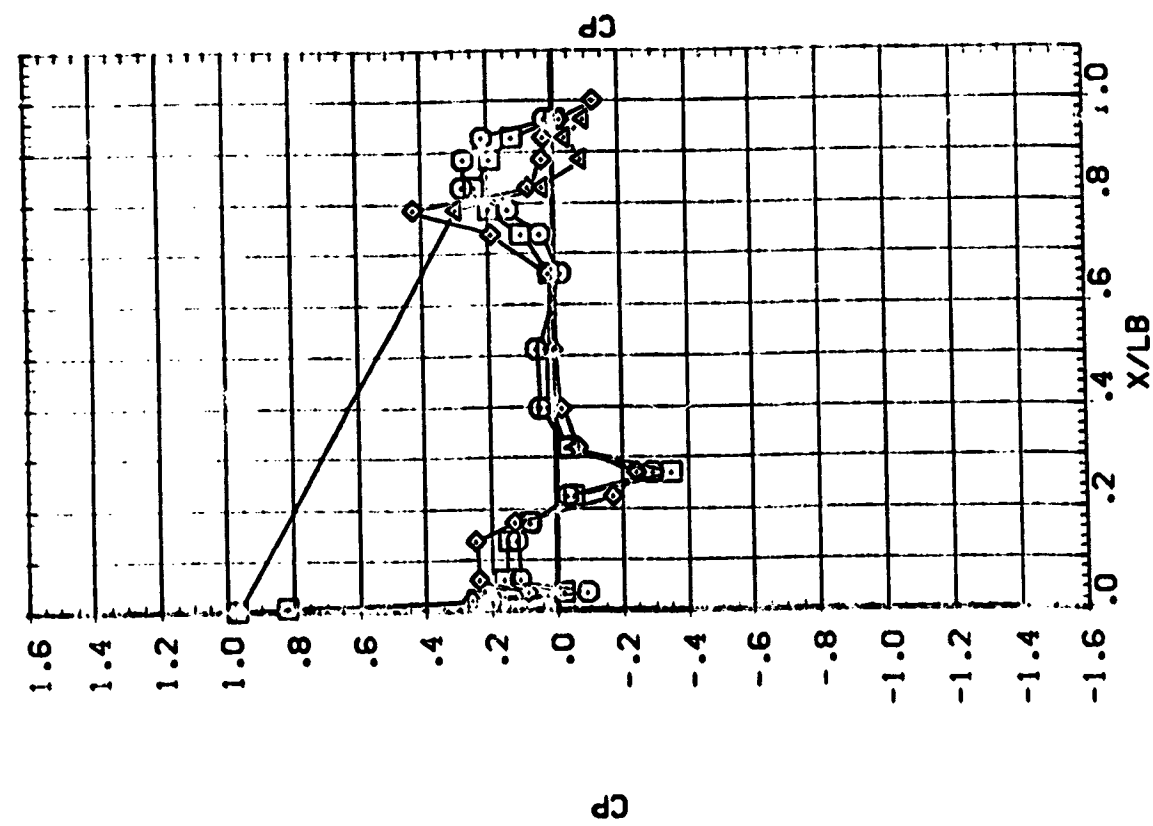
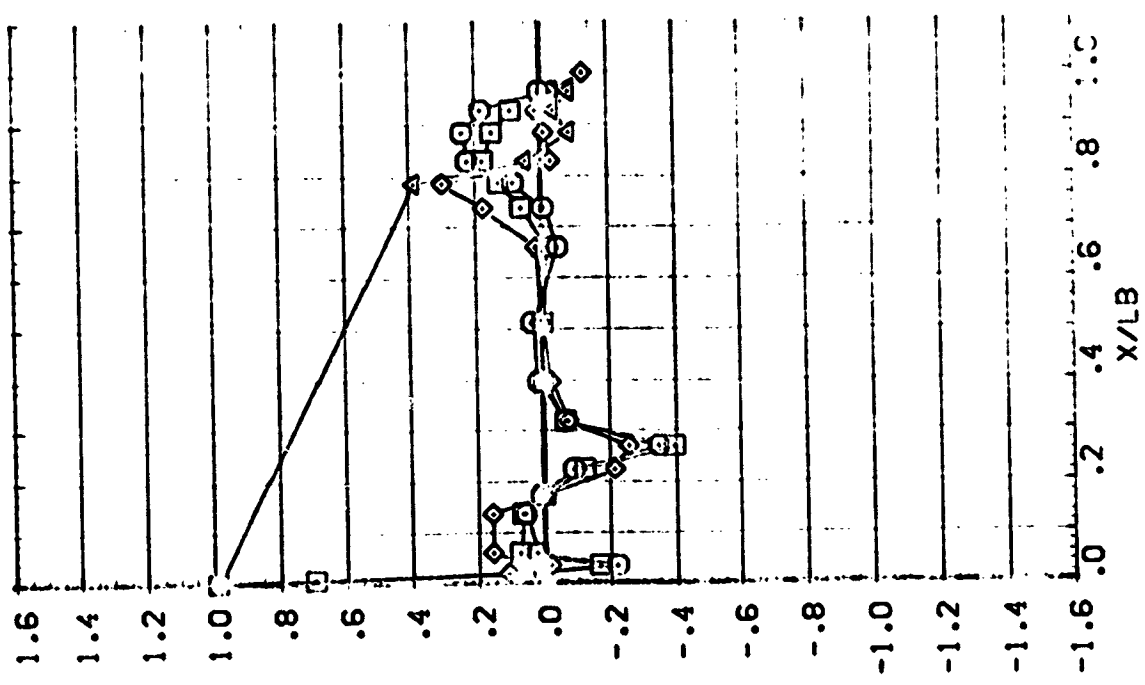
LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (P3P328)

AMES 11-707 CA:2 C2A

PARAMETRIC VALUES
 A2-A 9.000
 ELEVATION -70.000
 9.000
 9.000
 9.000

SWBC-
 70.000
 90.000
 120.000
 135.000
 BETA -7.970
 YAC- .597
 -3.940



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

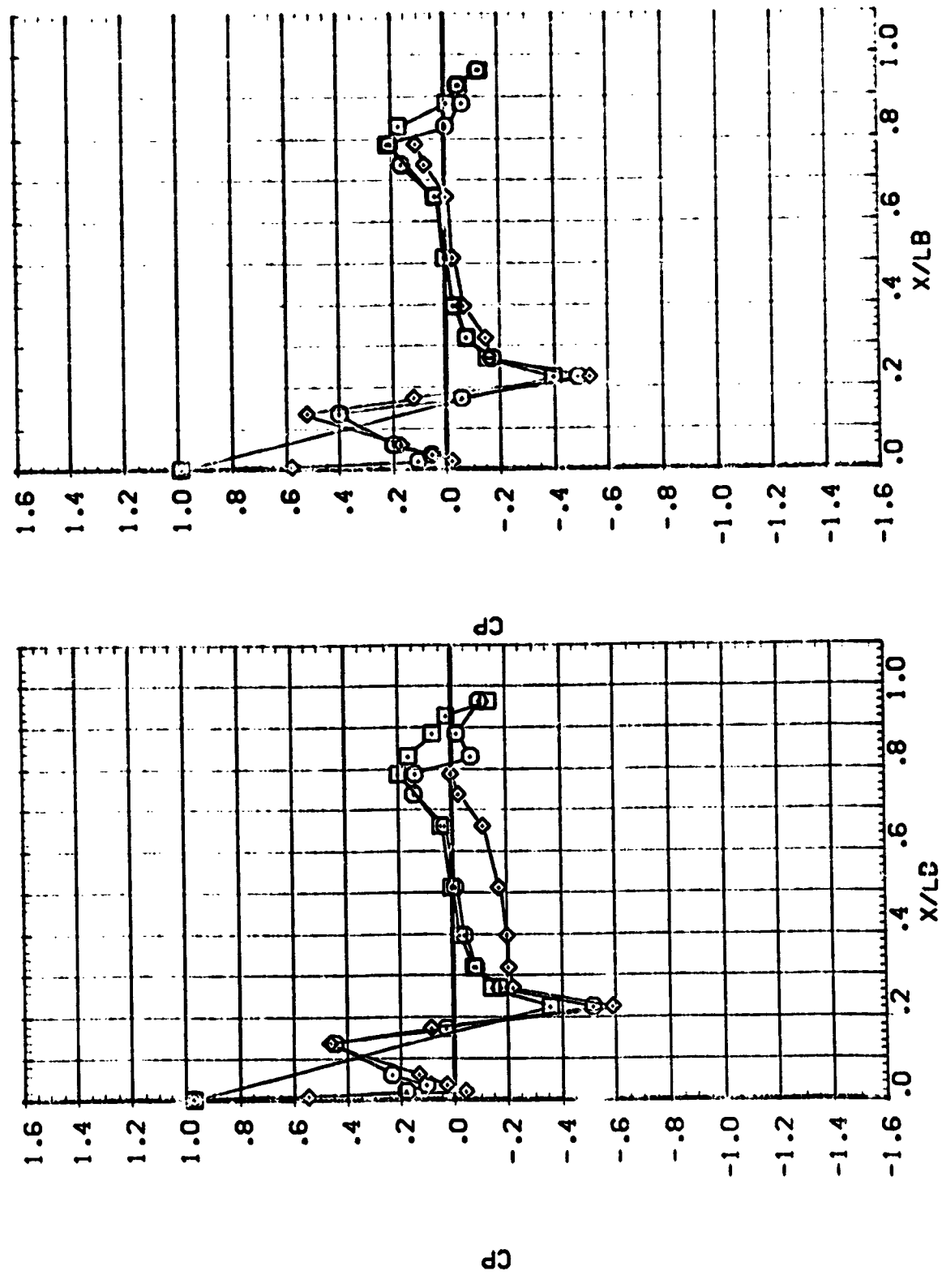


AVES :: -707 CA:2 C2A ORBITER FUSELAGE (R39328)

SYNCD
OL
◇

PM1 BETA MACH
150.000 -7.970 .597
165.000 -3.940
180.000

PARAMETRIC VALUES
A.P.A. .000 RUBBER
ELEVATION .000000 0.000000



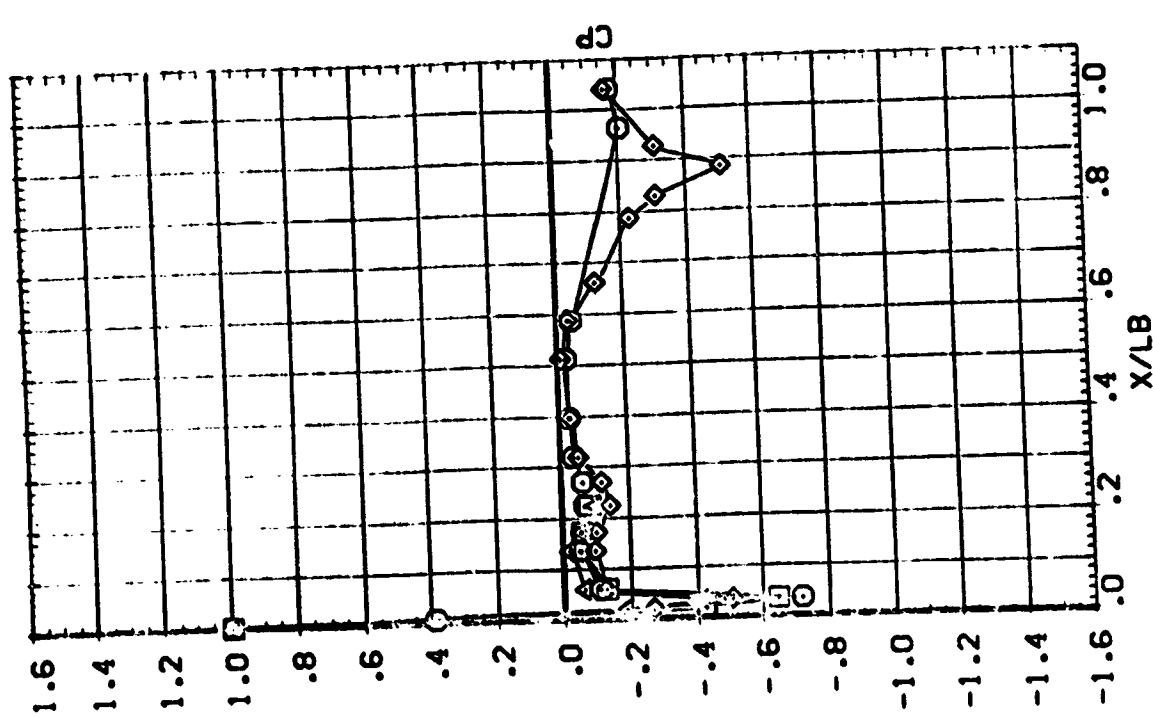
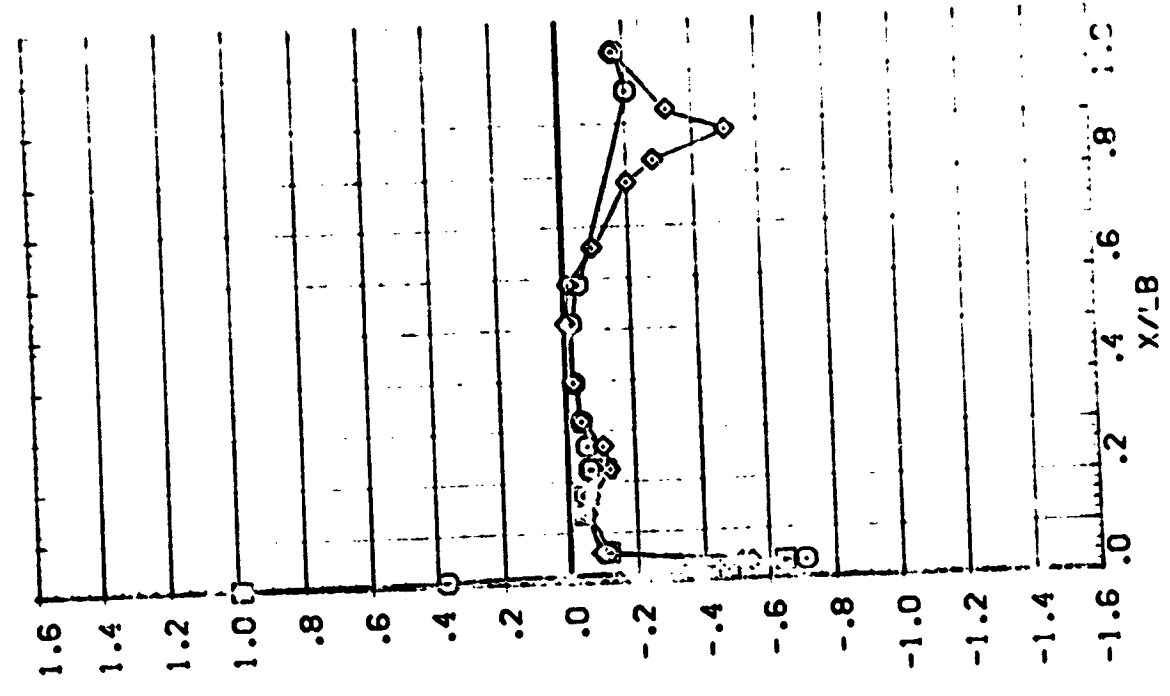
LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (333328)

AMES 11-707 3A12 02A

PARAMETRIC VALUES
 A-0.4
 B-0.000
 C-0.000
 D-0.000
 E-0.000
 F-0.000
 G-0.000
 H-0.000
 I-0.000
 J-0.000
 K-0.000
 L-0.000
 M-0.000
 N-0.000
 O-0.000
 P-0.000
 Q-0.000
 R-0.000
 S-0.000
 T-0.000
 U-0.000
 V-0.000
 W-0.000
 X-0.000
 Y-0.000
 Z-0.000

SYMBOL
 0.000
 20.000
 40.000
 60.000
 80.000
 100.000
 120.000
 140.000
 160.000
 180.000
 200.000
 220.000
 240.000
 260.000
 280.000
 300.000
 320.000
 340.000
 360.000
 380.000
 400.000
 420.000
 440.000
 460.000
 480.000
 500.000
 520.000
 540.000
 560.000
 580.000
 600.000
 620.000
 640.000
 660.000
 680.000
 700.000
 720.000
 740.000
 760.000
 780.000
 800.000
 820.000
 840.000
 860.000
 880.000
 900.000
 920.000
 940.000
 960.000
 980.000
 1000.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBPB28)

AVES 11-707 3A:2 32A

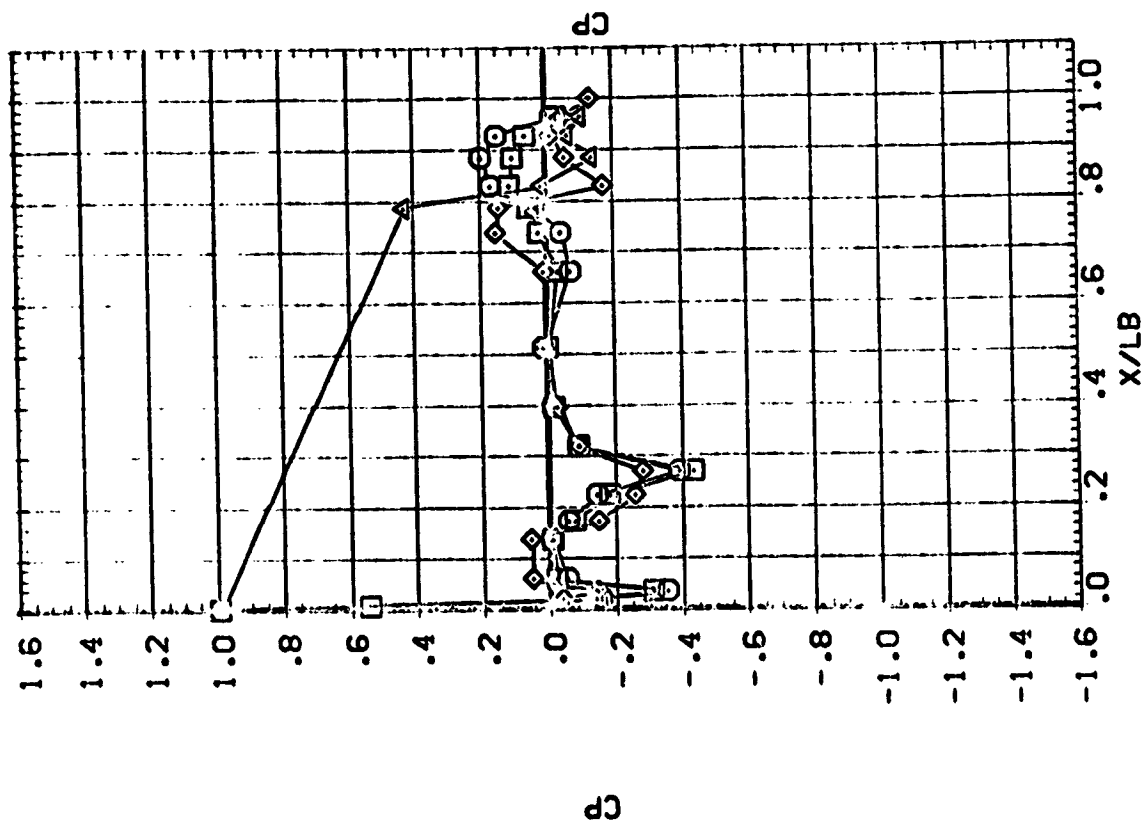
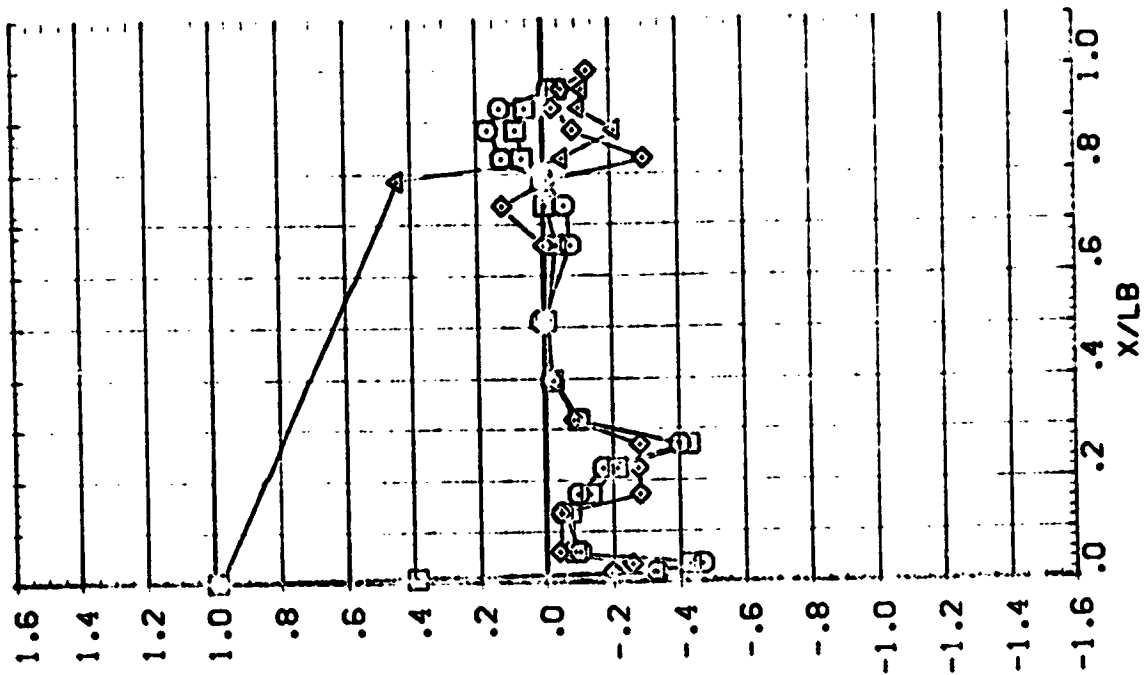
SVSC-
L
O
D

PH: 70.000
90.000
120.000
135.000

BETA .08C
4.19C

MAC .598

PARAMETRIC VALUES
ALPHA
ELEVON
-70.000
-70.000
-70.000
-70.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

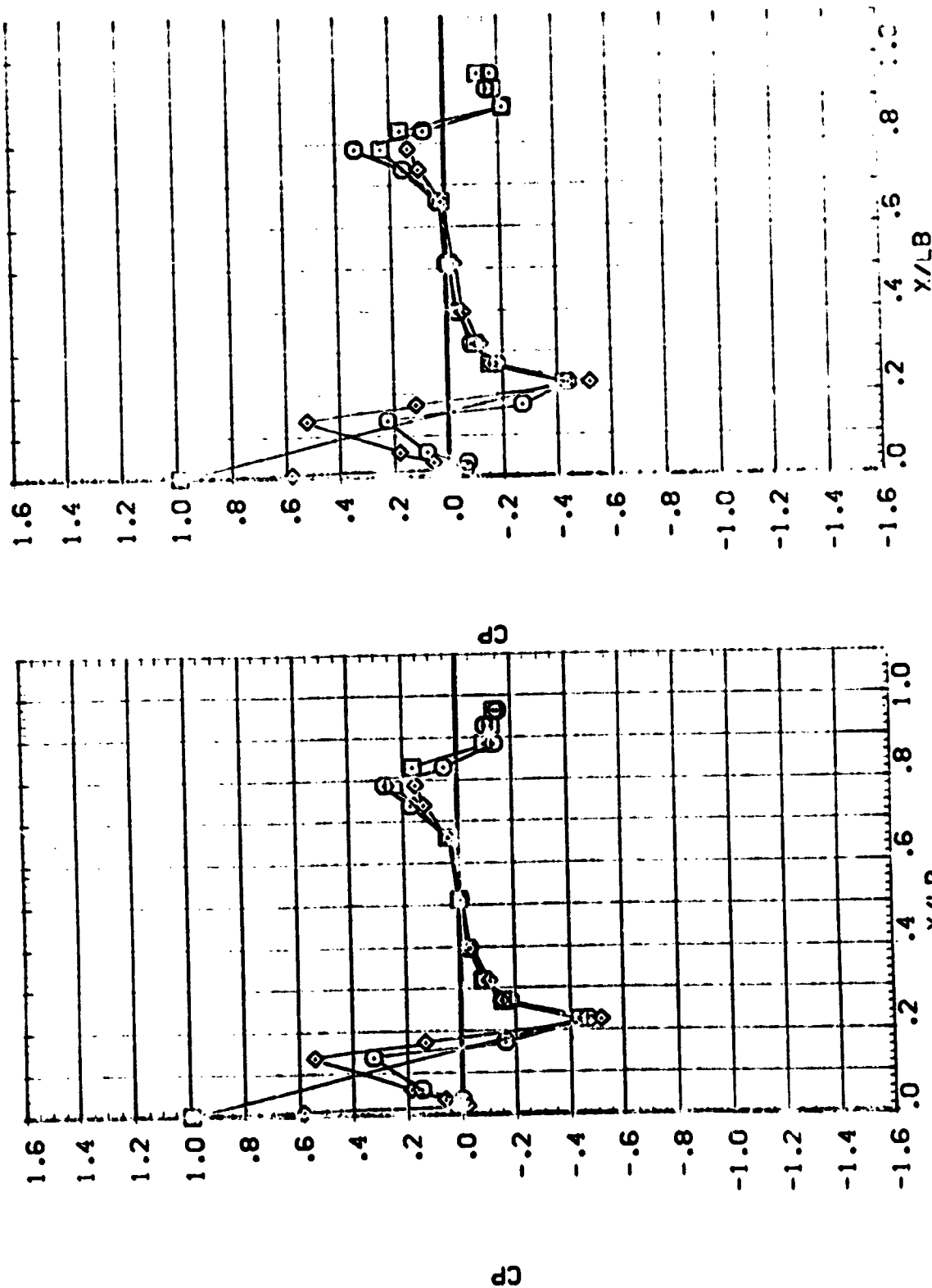
ORBITER FUSELAGE (999329)

AVES 11-707 CA12 C2A

SWGC
O
◇

DA: BETA WAC-
152.000 .000 .598
155.000 4.190
180.000

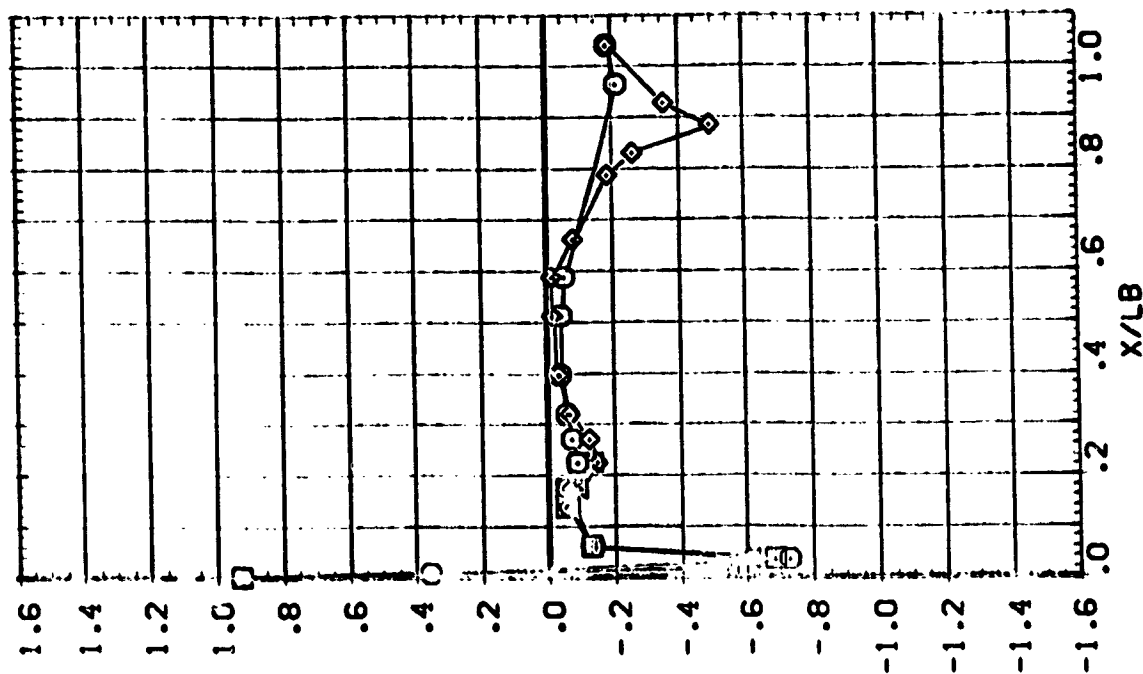
PARAMETRIC VALUES
A-2-A
E-2-A
-20.000
-20.000
-20.000



- LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

AVES 11-707 C-12 C2A ORBITER FUSELAGE (R37328)

SYSC	ALPHA	PARAMETER VALUES
0.000	0.000	0.000
20.000	0.000	0.000
40.000	0.000	0.000
55.000	0.000	0.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (R33328)

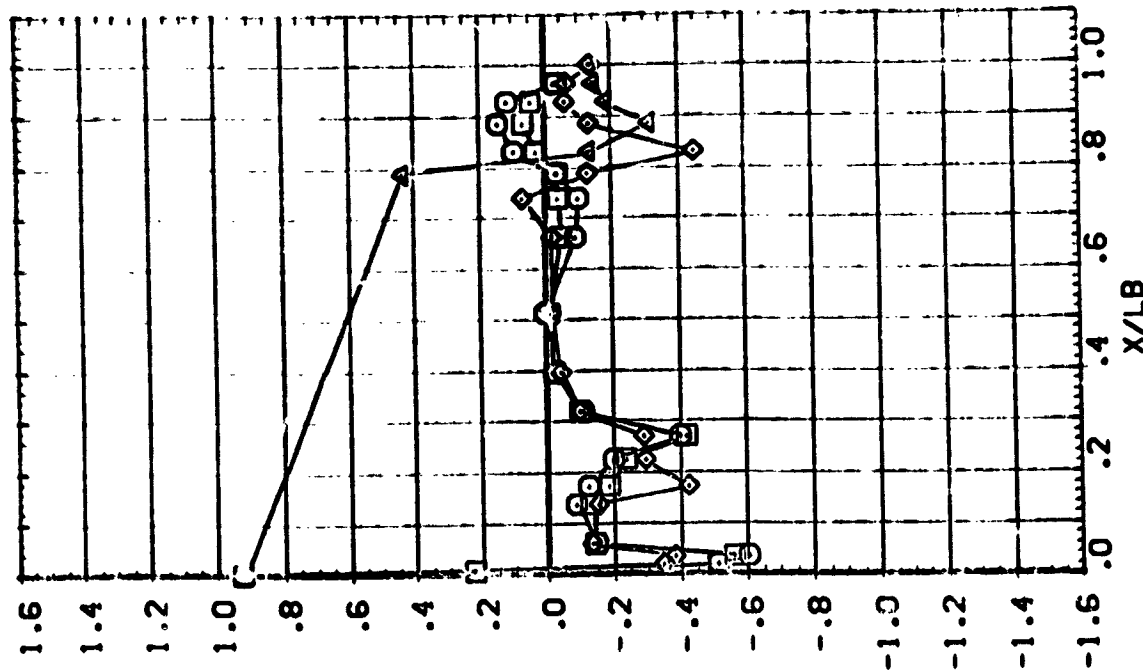
AVES 11-707 3A:2 C2A

PARAMETRIC VALUES
 .000 .000 .000
 .000 .000 .000
 .000 .000 .000

ALPHA
 ELEVATION

SWING
 70.000
 80.000
 90.000
 100.000
 110.000

ANGLE
 0.000
 1.000
 2.000
 3.000
 4.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

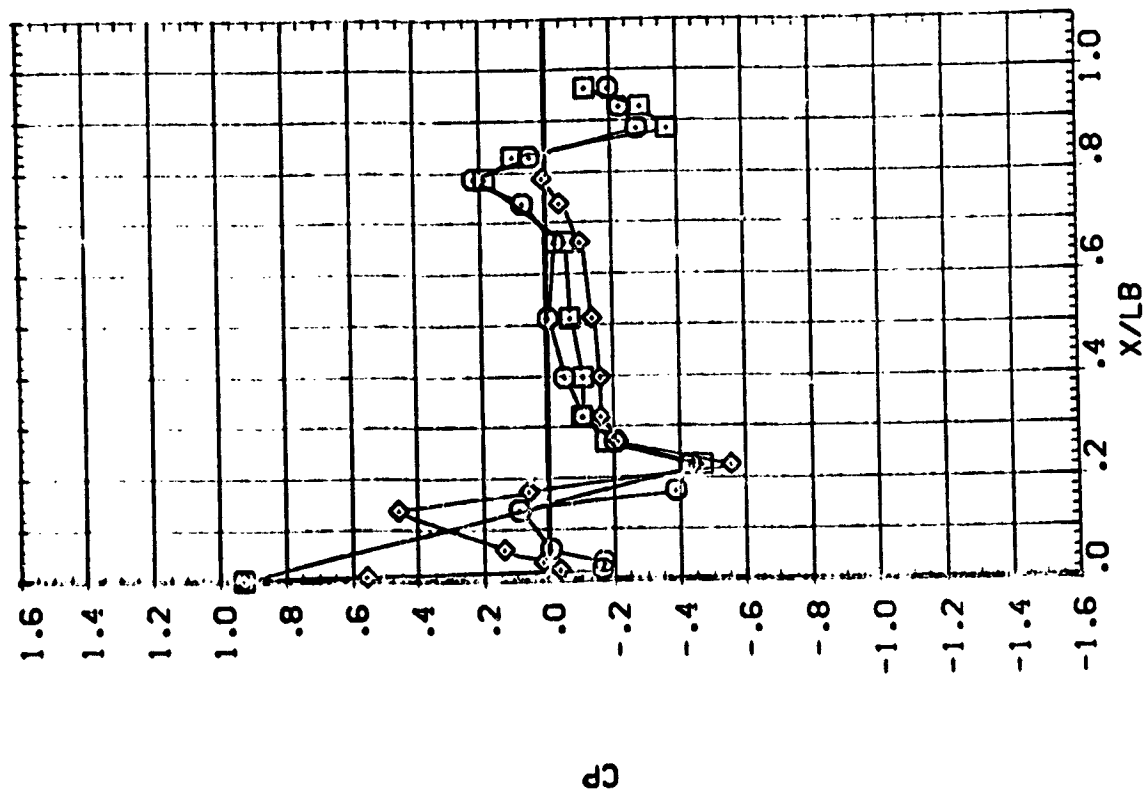
ORBITER FUSELAGE (RBP328)

PARAMETRIC VALUES
 .000 RUMBER
 -20.000 RUMBER

AVES : -707 CA:2 22A

SV32
 150.000
 155.000
 160.000
 165.000
 170.000
 175.000
 180.000

95.1A 8.790
 WAC 5.998



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

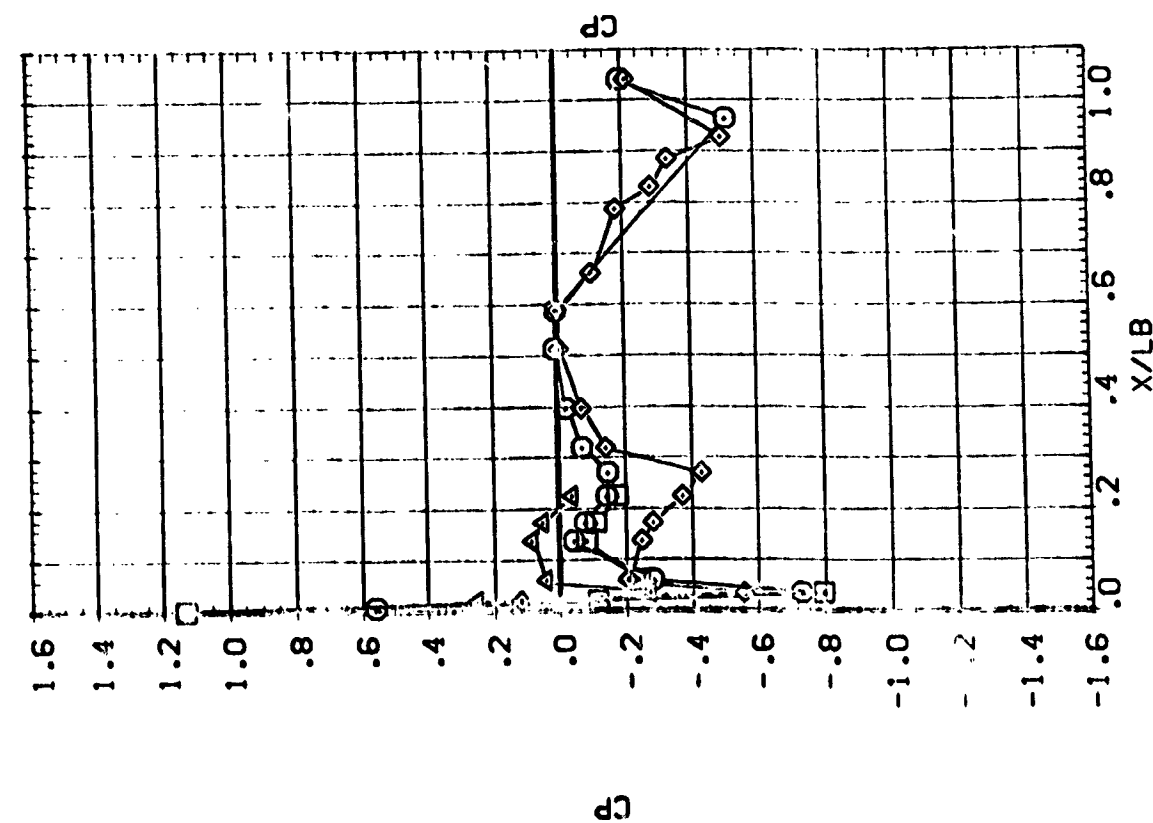
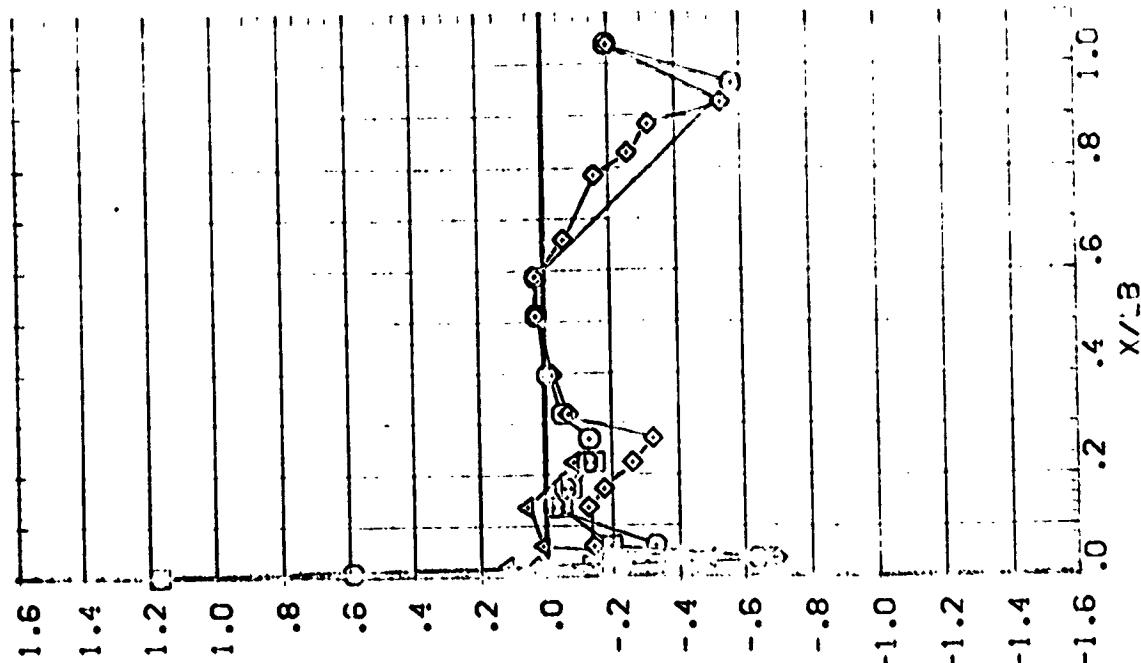
ORBITER FUSELAGE (PBP328)

AVES 11-707 CA:2 C2A

PARAMETER: JES
A.204 .000
E.512A -20.000 P.001.9 .000

SVAC: PHI BETA WACH
.000 -8.000 .900
20.000 -4.000
40.000
55.000

OLIO◇△



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBPB28)

AVES 11-707 0A12 02A

SVGC-

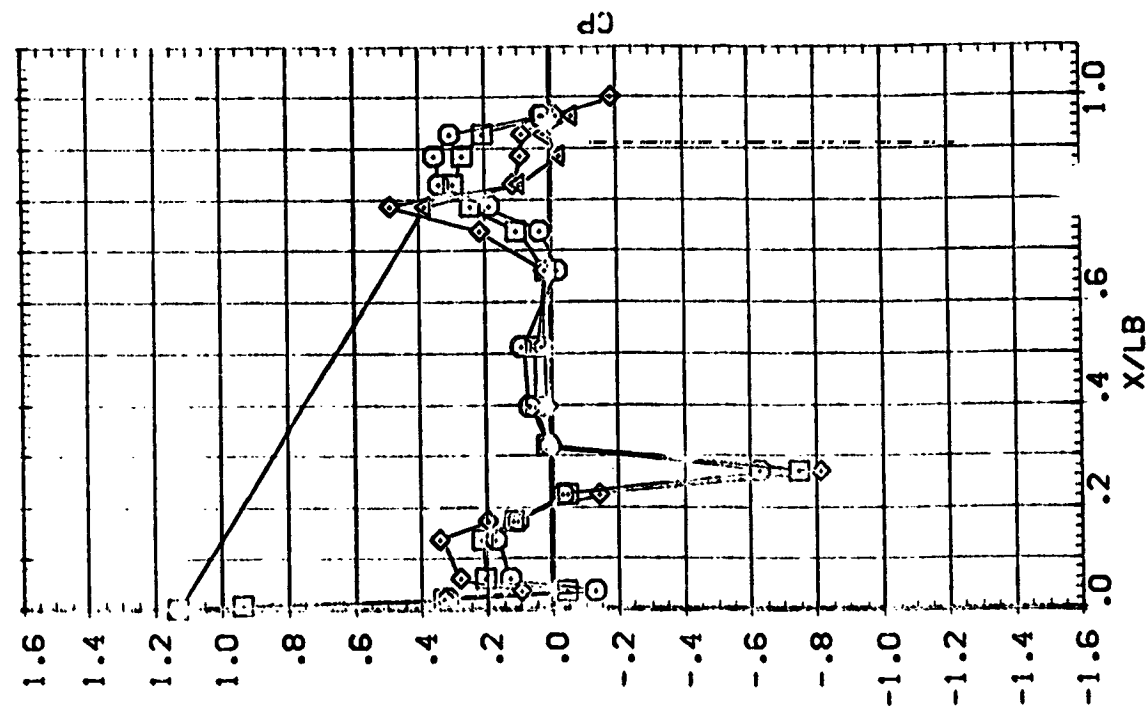
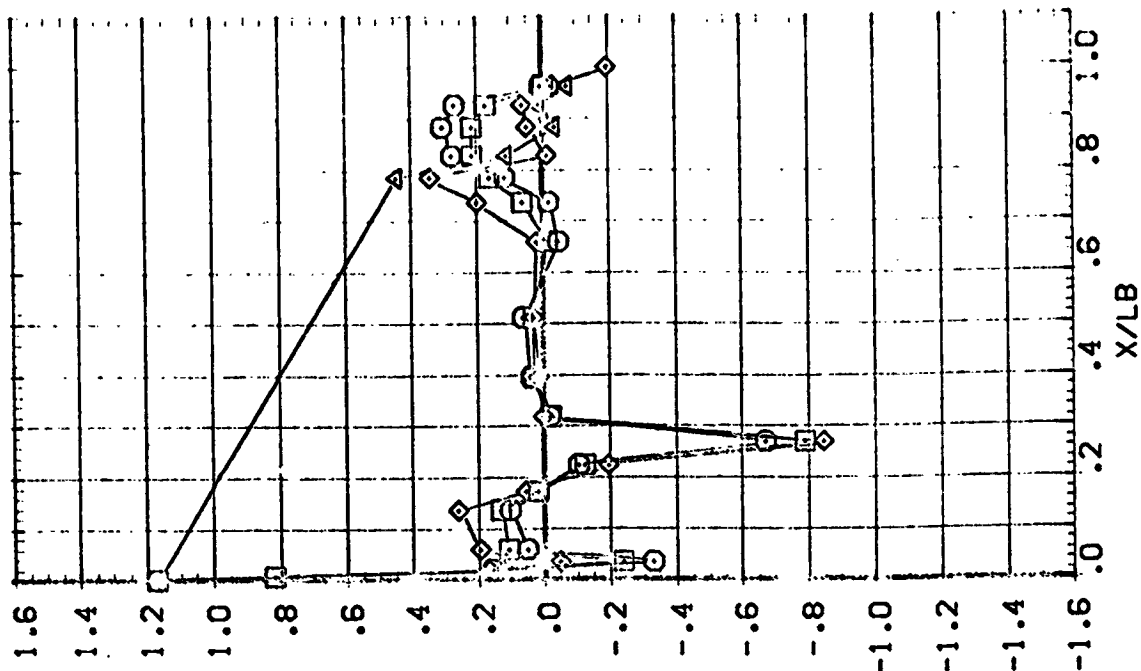
70.000
90.000
120.000
135.000

BETA
-3.08C
-4.000

VACH
.900

ALPHA
ELEVON
-20.000
20.000

PARAMETRIC VALUES
.000
9.000
9.000
20.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

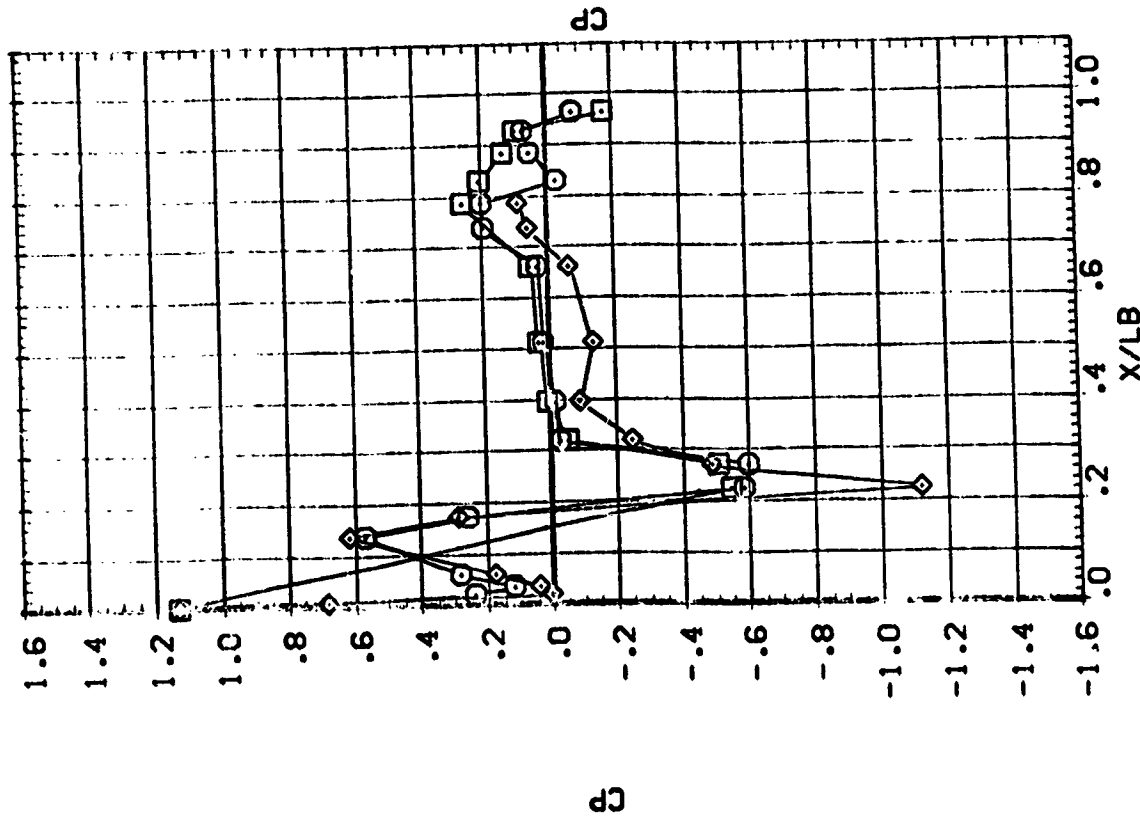
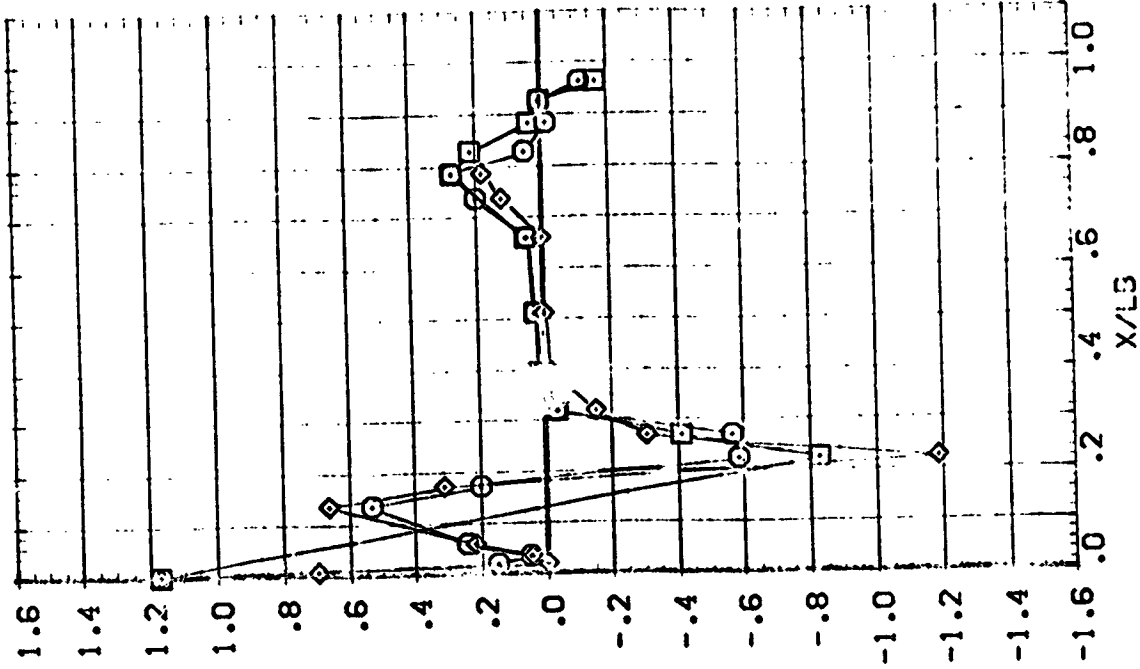
SWGL
150.000
165.000
180.000

BH1
150.000
165.000
180.000

BETA
-8.000
-4.000

VAC
.900

PARAMETRIC VALUES
ALPHA
ELEVATION
-20.000
RUDDER
RUDFLR
.000
.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (R3P828)

AVES 11-707 3A:2 32A

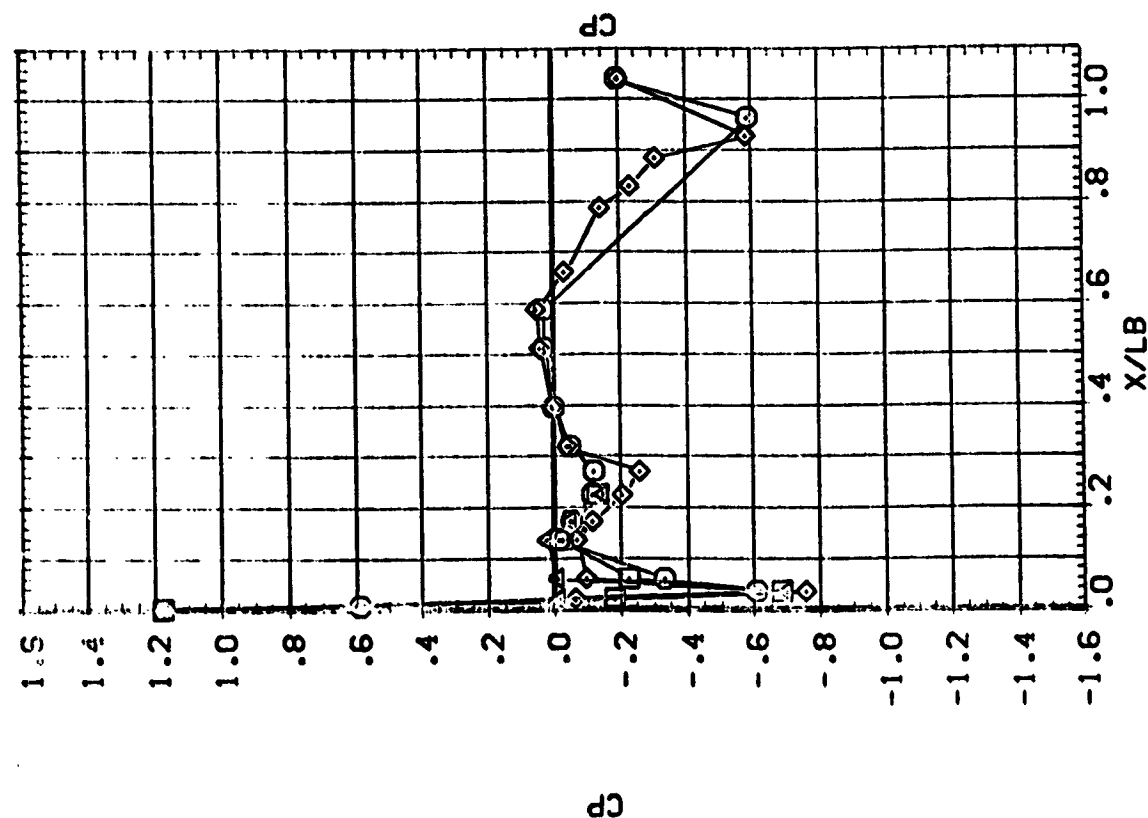
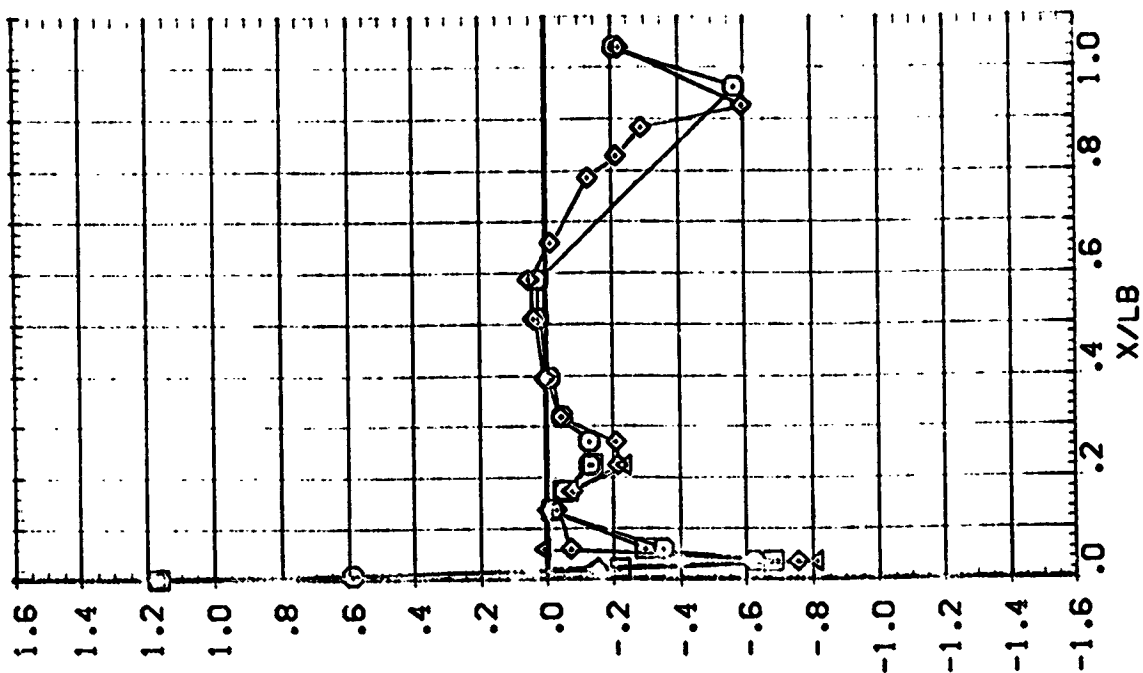
SYMBOL

P4: .000
 20.000
 40.000
 55.000

BETA .080
 4.740

MACH .900

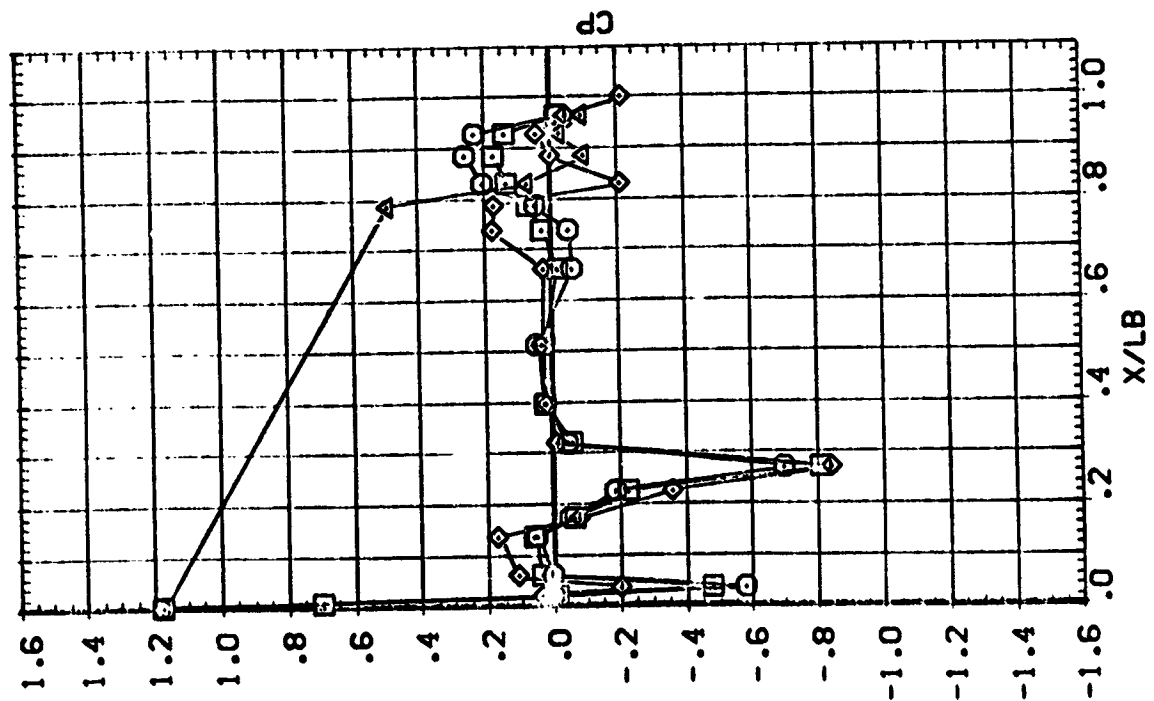
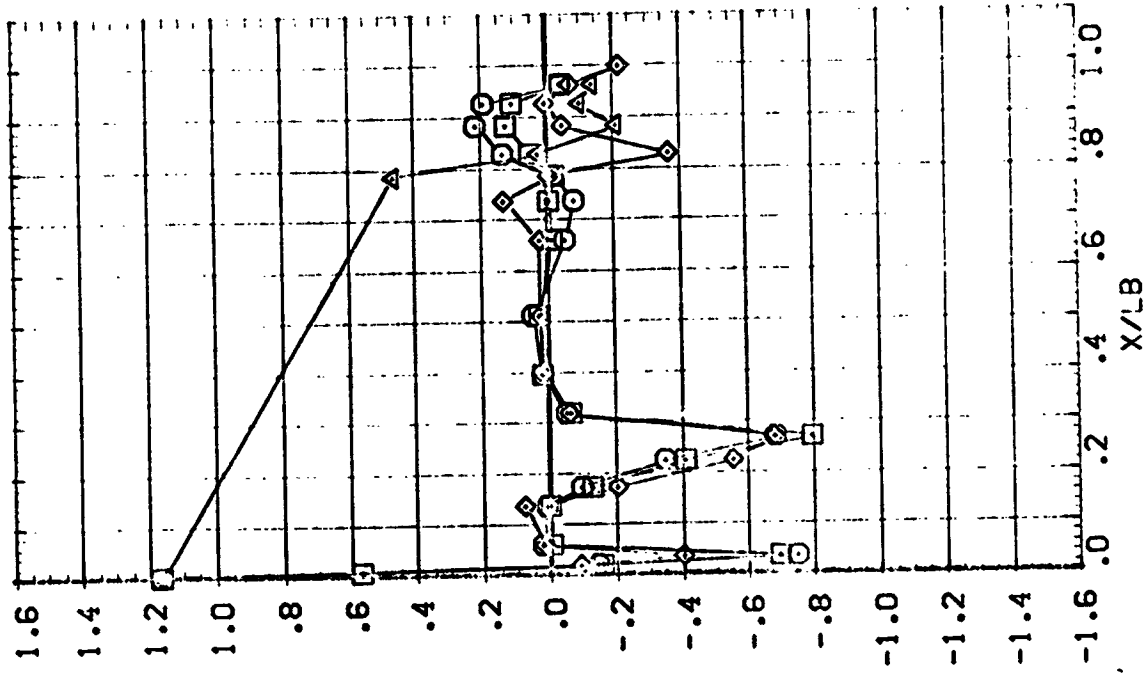
PARAMETRIC VALUES
 ALPHA .000
 ELEVON -20.000
 RUDDER .000
 RUFLR .000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

PARAMETRIC VALUES
ALPHA .000
ELEV -20.000
RUDDER .000
RUDFLR .000

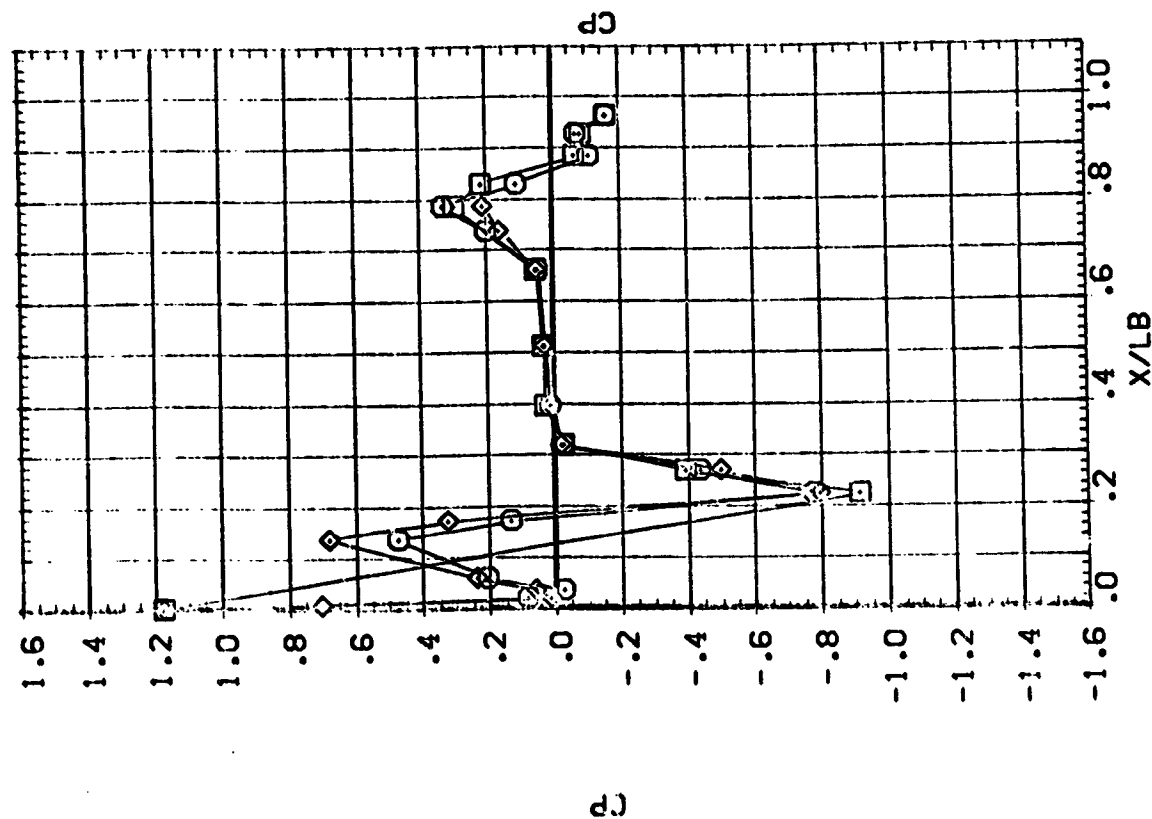
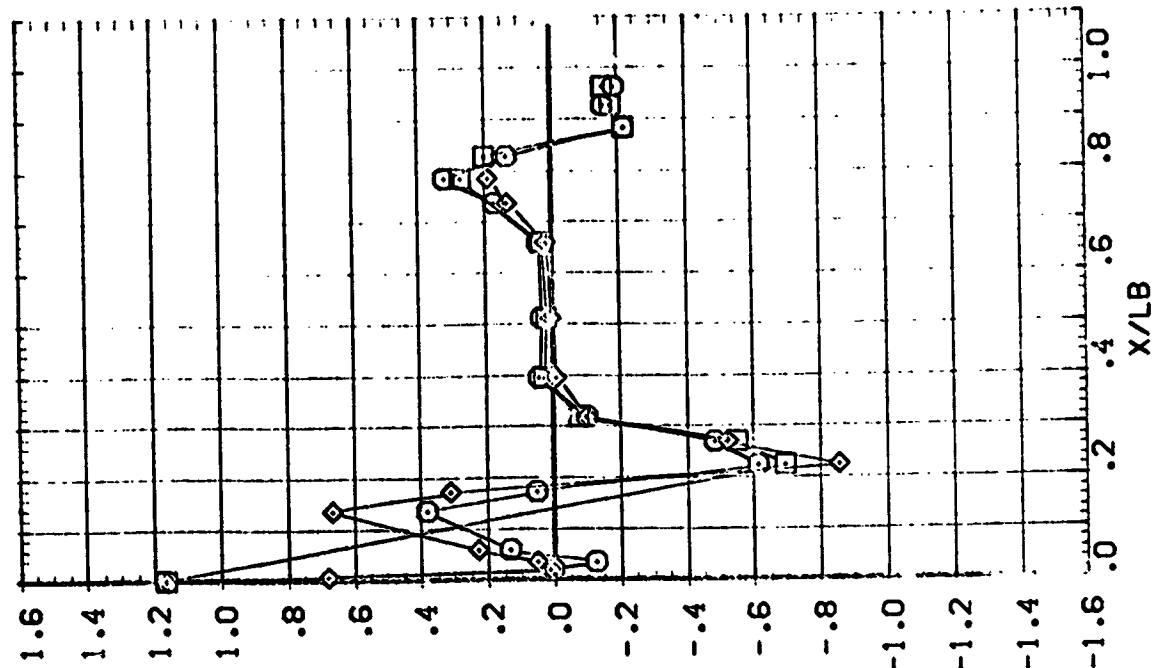
PHI 70.000
90.000
120.000
135.000
BETA .080
4.240
MACH .900



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

[illegible]

SWR	PL	BETA	MAC
101	50.000	.080	.900
110	50.000	.080	.900
120	50.000	.080	.900
130	50.000	.080	.900
140	50.000	.080	.900
150	50.000	.080	.900
160	50.000	.080	.900
170	50.000	.080	.900
180	50.000	.080	.900
190	50.000	.080	.900
200	50.000	.080	.900
210	50.000	.080	.900
220	50.000	.080	.900
230	50.000	.080	.900
240	50.000	.080	.900
250	50.000	.080	.900
260	50.000	.080	.900
270	50.000	.080	.900
280	50.000	.080	.900
290	50.000	.080	.900
300	50.000	.080	.900
310	50.000	.080	.900
320	50.000	.080	.900
330	50.000	.080	.900
340	50.000	.080	.900
350	50.000	.080	.900
360	50.000	.080	.900
370	50.000	.080	.900
380	50.000	.080	.900
390	50.000	.080	.900
400	50.000	.080	.900
410	50.000	.080	.900
420	50.000	.080	.900
430	50.000	.080	.900
440	50.000	.080	.900
450	50.000	.080	.900
460	50.000	.080	.900
470	50.000	.080	.900
480	50.000	.080	.900
490	50.000	.080	.900
500	50.000	.080	.900
510	50.000	.080	.900
520	50.000	.080	.900
530	50.000	.080	.900
540	50.000	.080	.900
550	50.000	.080	.900
560	50.000	.080	.900
570	50.000	.080	.900
580	50.000	.080	.900
590	50.000	.080	.900
600	50.000	.080	.900
610	50.000	.080	.900
620	50.000	.080	.900
630	50.000	.080	.900
640	50.000	.080	.900
650	50.000	.080	.900
660	50.000	.080	.900
670	50.000	.080	.900
680	50.000	.080	.900
690	50.000	.080	.900
700	50.000	.080	.900
710	50.000	.080	.900
720	50.000	.080	.900
730	50.000	.080	.900
740	50.000	.080	.900
750	50.000	.080	.900
760	50.000	.080	.900
770	50.000	.080	.900
780	50.000	.080	.900
790	50.000	.080	.900
800	50.000	.080	.900
810	50.000	.080	.900
820	50.000	.080	.900
830	50.000	.080	.900
840	50.000	.080	.900
850	50.000	.080	.900
860	50.000	.080	.900
870	50.000	.080	.900
880	50.000	.080	.900
890	50.000	.080	.900
900	50.000	.080	.900
910	50.000	.080	.900
920	50.000	.080	.900
930	50.000	.080	.900
940	50.000	.080	.900
950	50.000	.080	.900
960	50.000	.080	.900
970	50.000	.080	.900



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

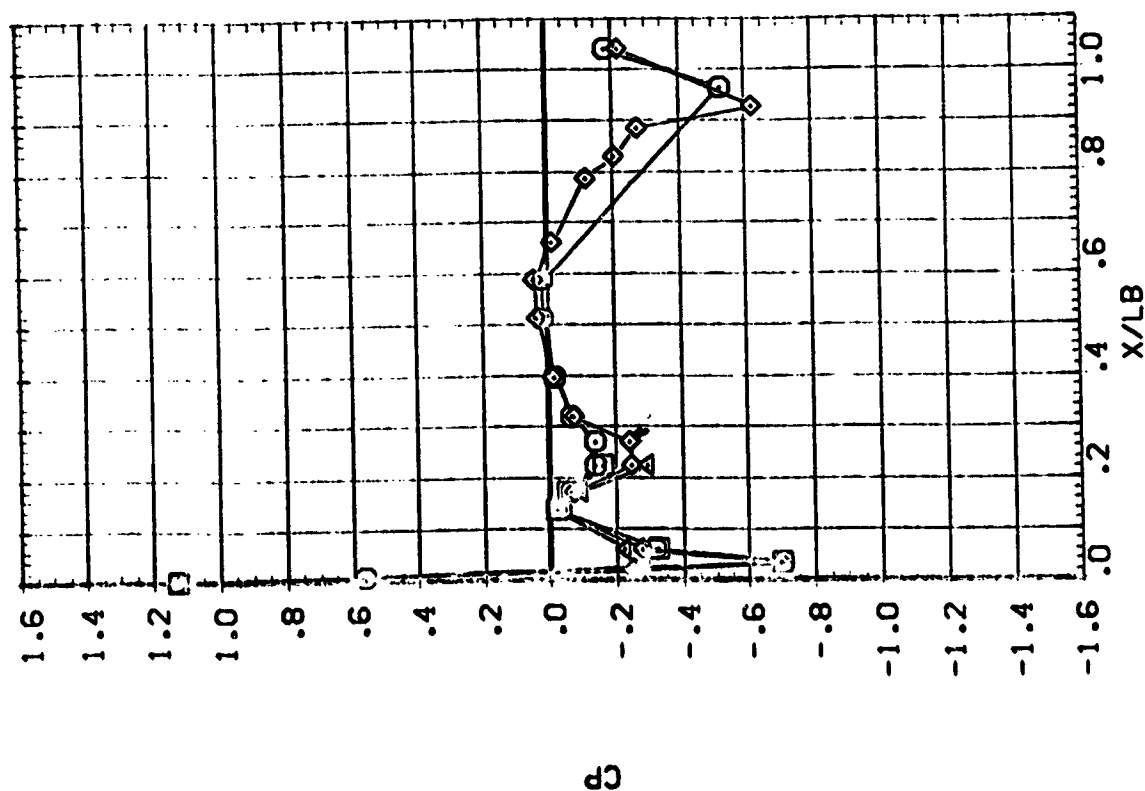
ORBITER FUSELAGE (R3P328)

AVES 11-707 CA:2 02A

PARAMETRIC VALUES
 .000 RUDDER
 .000 RUDFLR
 -20.000 ELEVON

SVAC-
 0
 1
 2
 3
 4
 5
 6
 7
 8
 9
 10
 11
 12
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22
 23
 24
 25
 26
 27
 28
 29
 30
 31
 32
 33
 34
 35
 36
 37
 38
 39
 40
 41
 42
 43
 44
 45
 46
 47
 48
 49
 50
 51
 52
 53
 54
 55
 56
 57
 58
 59
 60
 61
 62
 63
 64
 65
 66
 67
 68
 69
 70
 71
 72
 73
 74
 75
 76
 77
 78
 79
 80
 81
 82
 83
 84
 85
 86
 87
 88
 89
 90
 91
 92
 93
 94
 95
 96
 97
 98
 99
 100

PA: .000 MACH .904
 20.000
 40.000
 55.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

CRBITER FUSELAGE (R3P328)

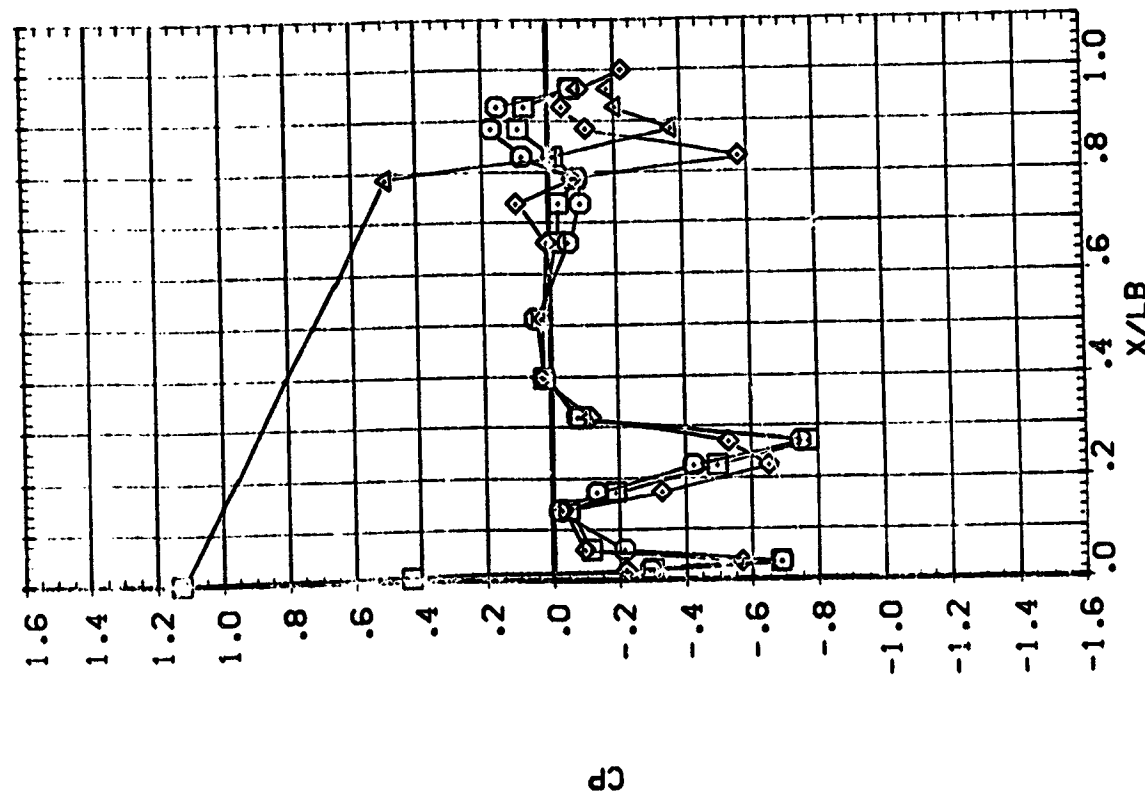
AVES 11-707 CA:2 02A

PARAMETRIC VALUES
 .000 RUDDER
 -20.000 RUJFLR
 .000

ALPHA
 ELEVEN

SYMBOL
 O 75.000
 I 90.000
 D 125.000
 A 135.000

BETA 6.400
 MACH .904



LONGITUDINAL DISTRIBUTION OF CRBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBPB28)

AVES 11-7C7 0A12 02A

PARAMETRIC VALUES
 .000 R₀₀₀
 -20.000 R₀₀₁

ALPHA
 ELEVON

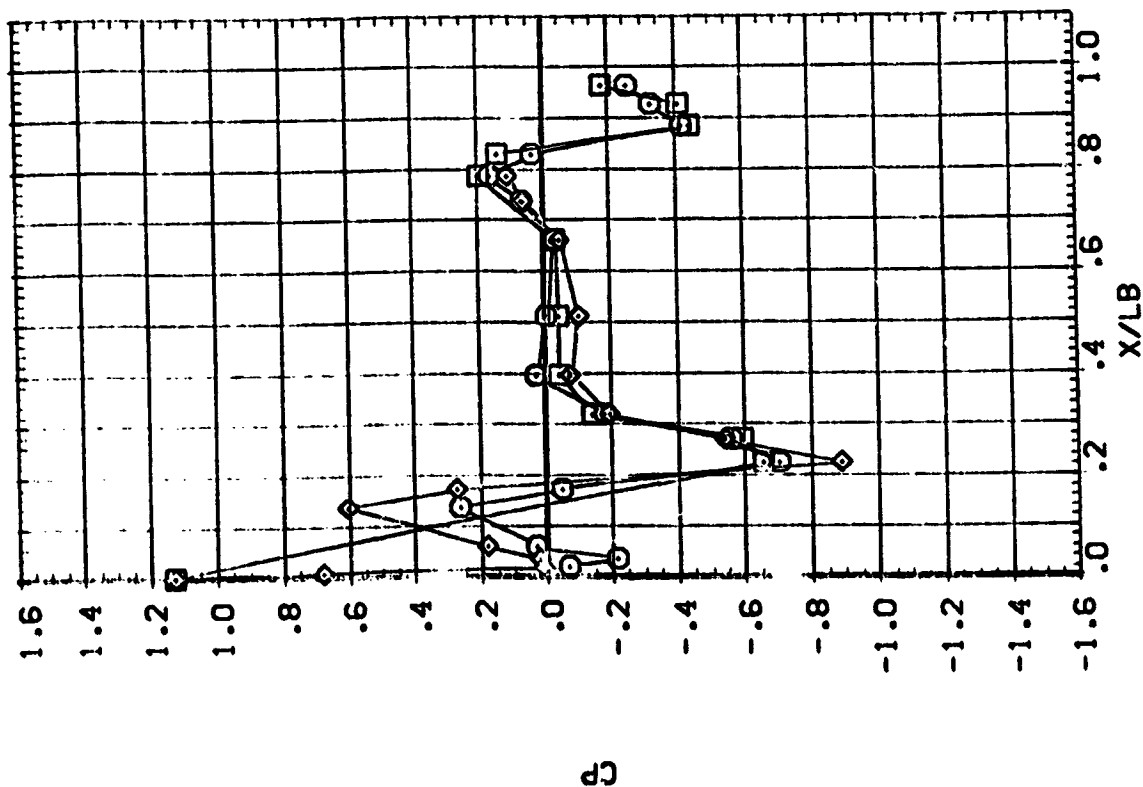
BETA MACH

8.400 .904

150.000
 165.000
 180.000

SYMBOL

□ ○ ◇



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES



ORBITER FUSELAGE (R3P334)

AVES 11-707 0A:2 32A

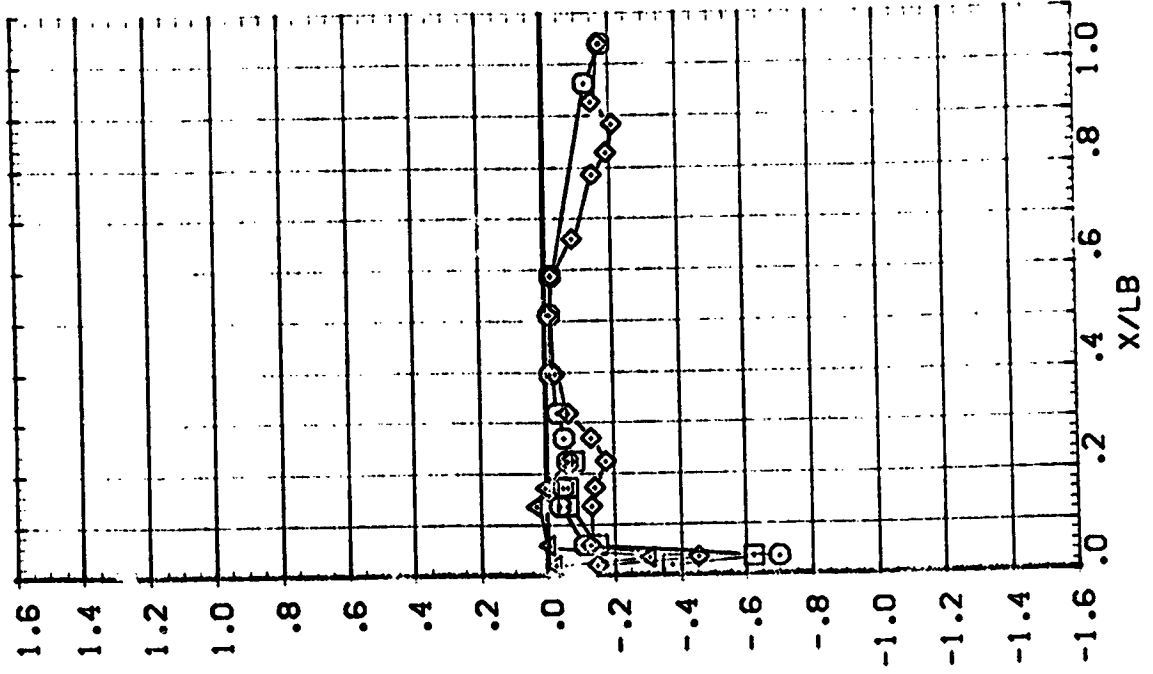
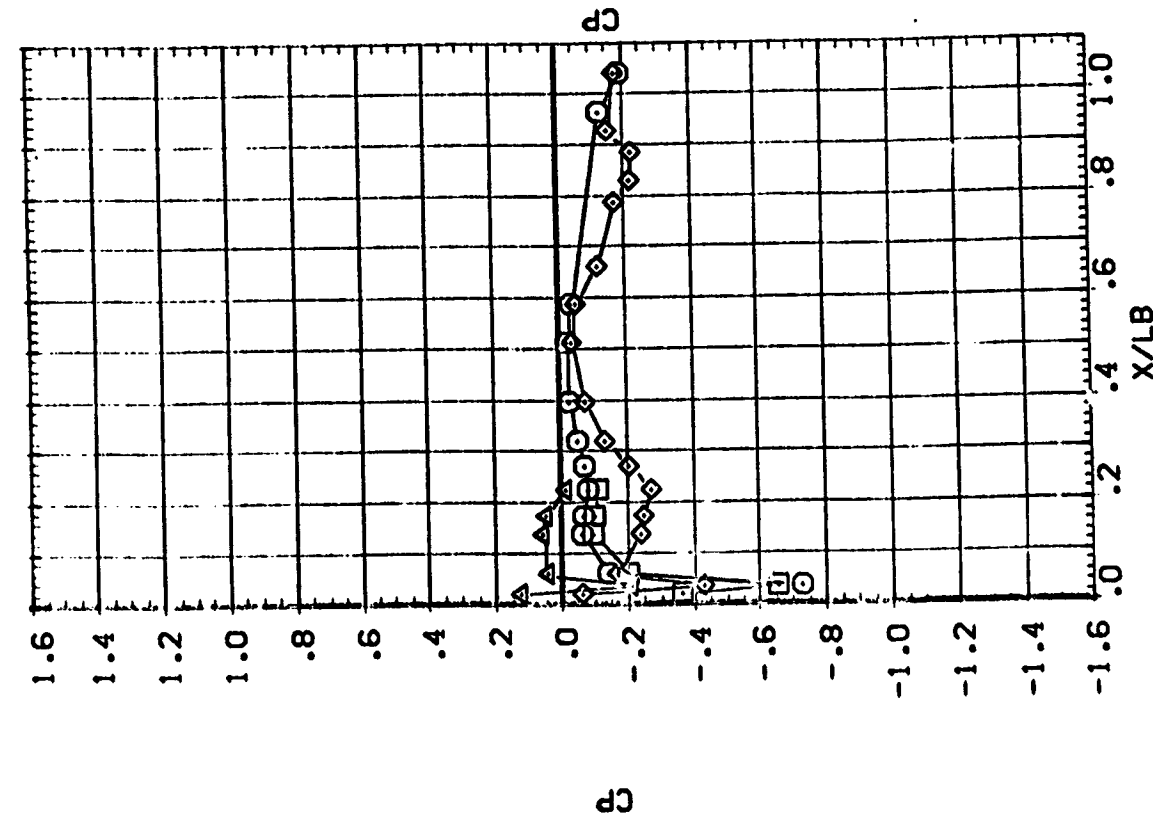
SVBC:
O
◇
△

PM: .000
20.000
40.000
55.000

BETA -7.990
-3.950

MACH .599

PARAMETRIC VALUES
ALPHA .000
ELEV .000
RUJER .000
RUJFLR 40.000



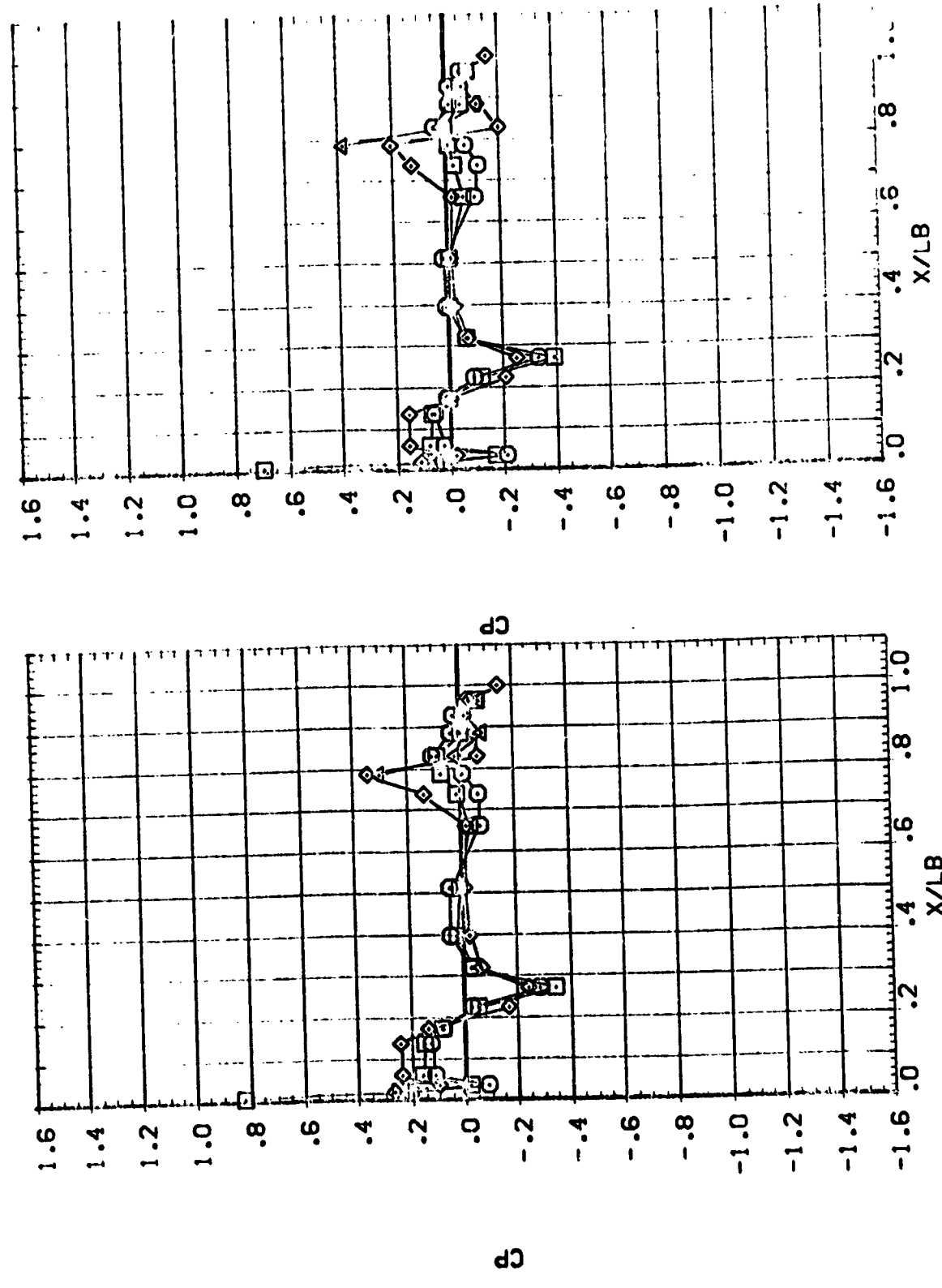
LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBPB34)

AVES 1:-707 0A12 02A

P1: 70.000 MACH .539
 90.000
 120.000
 135.000
 BE'A -7.99C
 -3.95C
 ALPHA .000
 ELEVON .000
 PARABOLIC VALUES
 .000
 .000
 .000
 .000

SW3C
 ○
 ◇
 △



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBPB34)

AVES : -707 CA12 02A

PARAMETRIC VALUES
 .000 P_UZER
 .000 P_UZER
 40.000

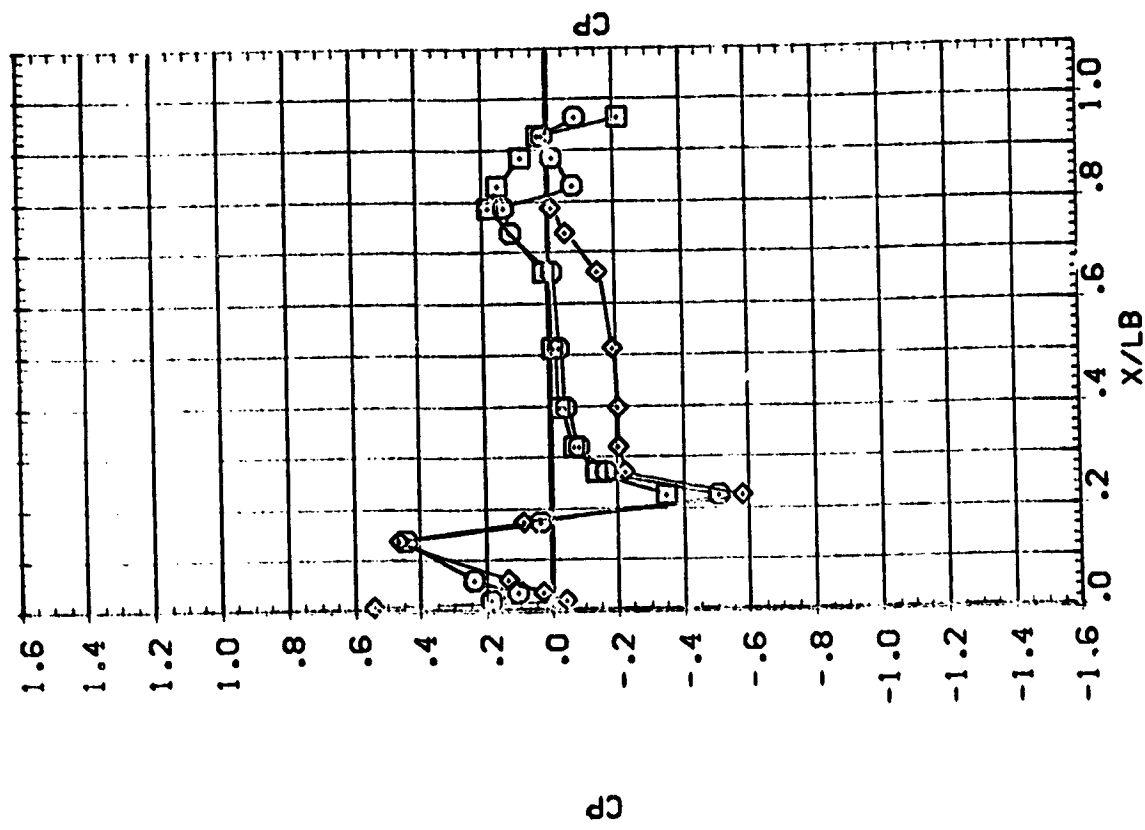
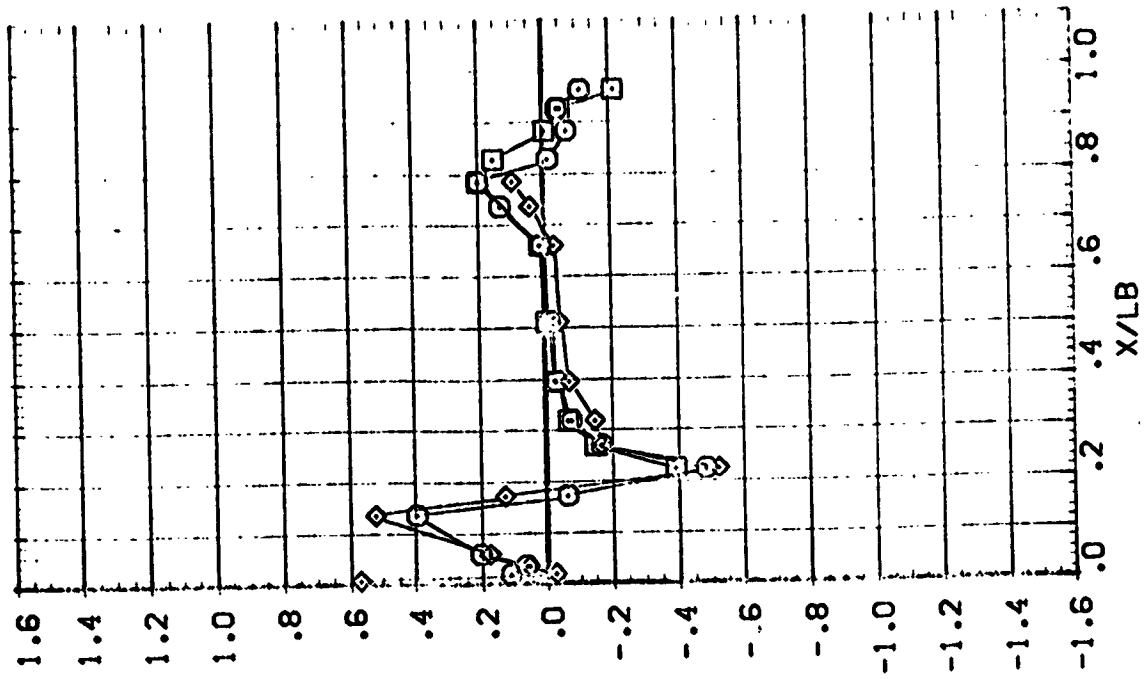
ALPHA
 ELEVON

BETA
 MACH

-7.990
 -3.950

50.000
 65.000
 80.000

SVVC-
 ()
 ()



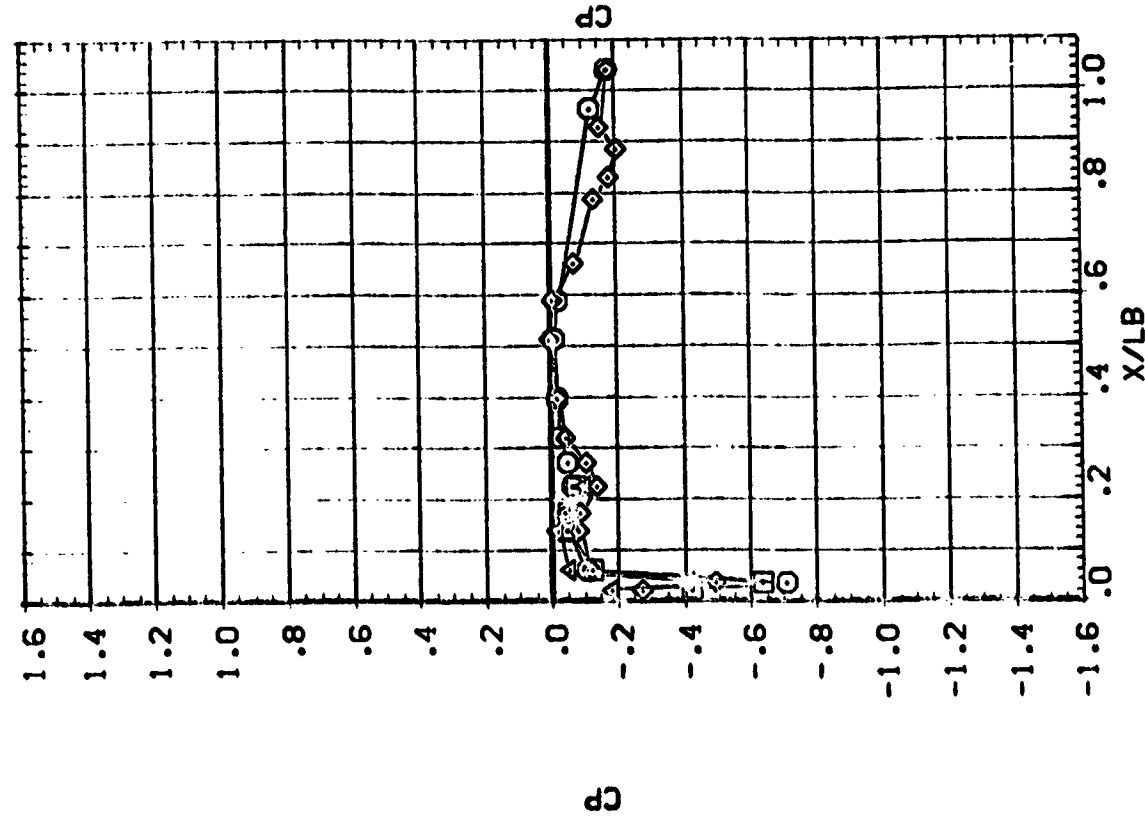
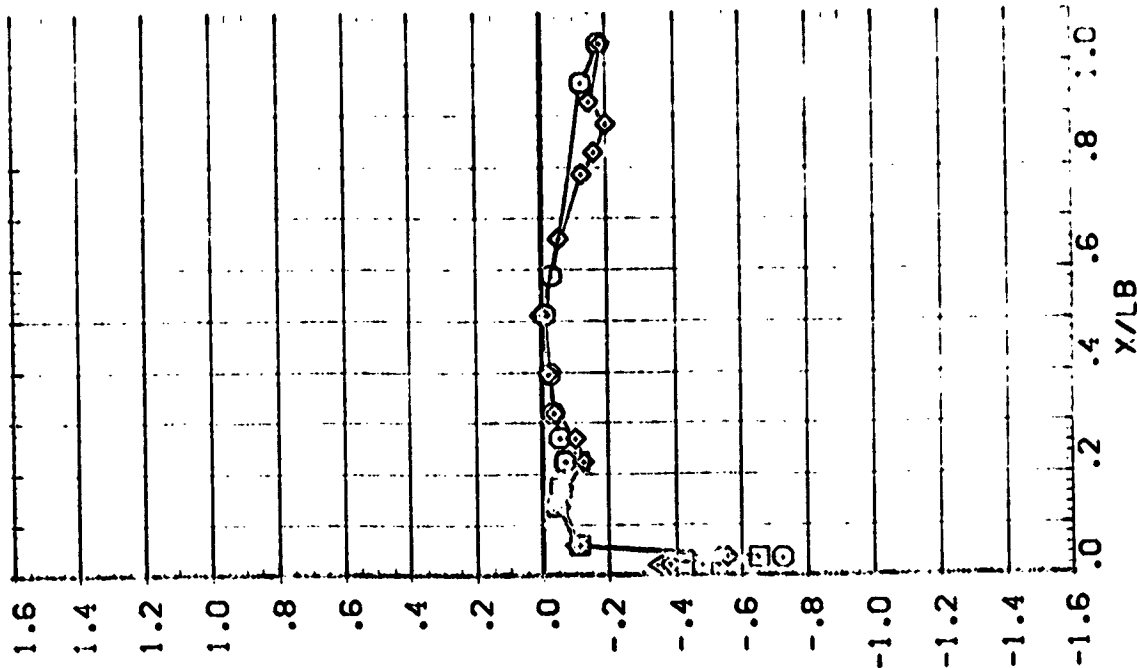
LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (R3PB34)

AMES :-707 3A12 02A

PARAMETRIC VALUES
 ALPHA .000
 ELEVON .000
 RUD .000
 RUD .000

SVABC
 010
 20 000
 40 000
 55 000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (P3P334)

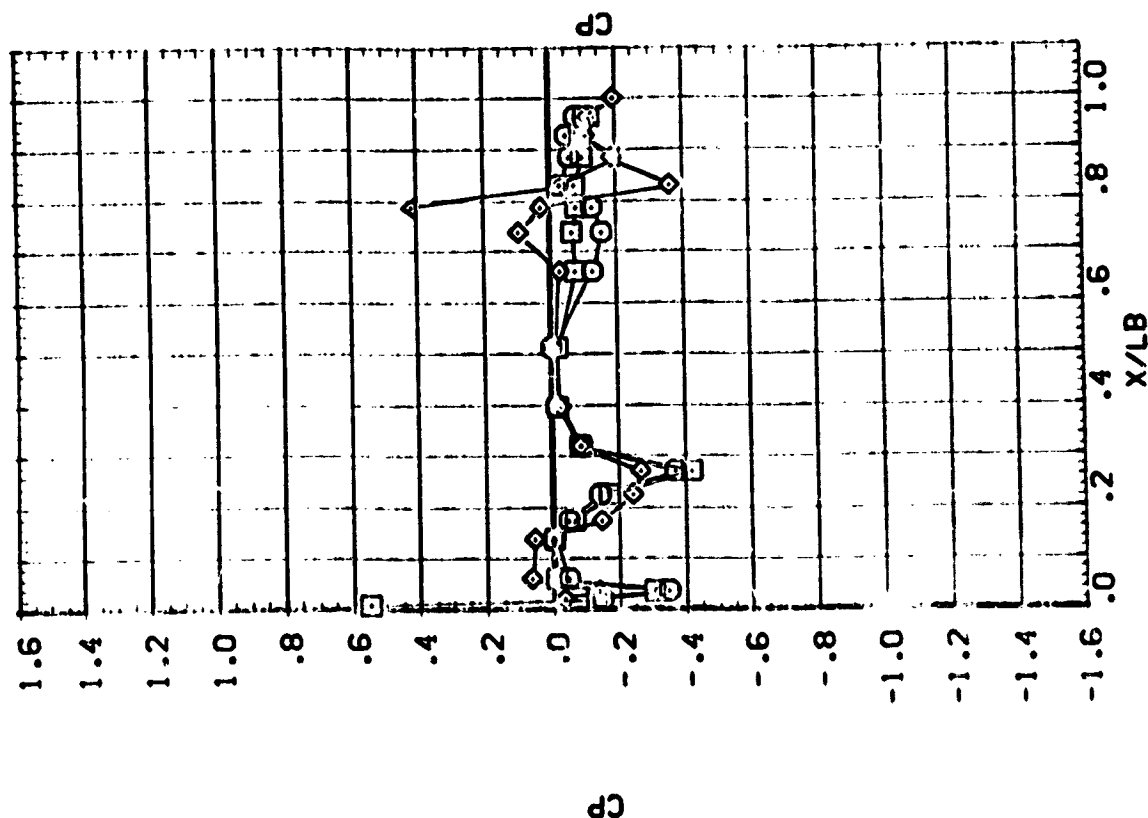
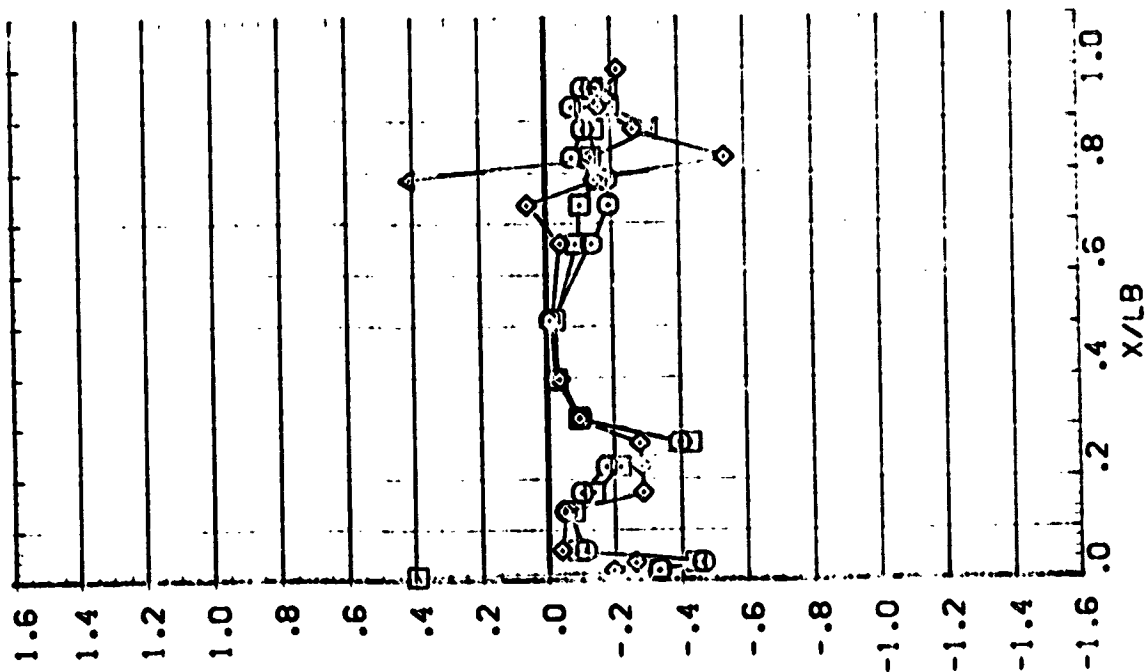
PARAMETRIC VALUES
 ALPHA .000
 BETA .000
 GAMMA .000
 DELTA .000
 EPSILON .000
 ZETA .000
 ETA .000
 THETA .000
 PHI .000
 CHI .000
 PSI .000
 OMEGA .000
 KAPPA .000
 LAMDA .000
 MU .000
 NU .000
 XI .000
 PI .000
 RHO .000
 SIGMA .000
 TAU .000
 Upsilon .000
 PHOENIX .000
 CHI .000
 PSI .000
 OMEGA .000
 KAPPA .000
 LAMDA .000
 MU .000
 NU .000
 XI .000
 PI .000
 RHO .000
 SIGMA .000
 TAU .000
 Upsilon .000
 PHOENIX .000

AVES 11-707 CA:2 C2A

SWGC-
 70.000
 90.000
 170.000
 135.000

SE'A
 .000
 4.200

MACH
 .500



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (R83334)

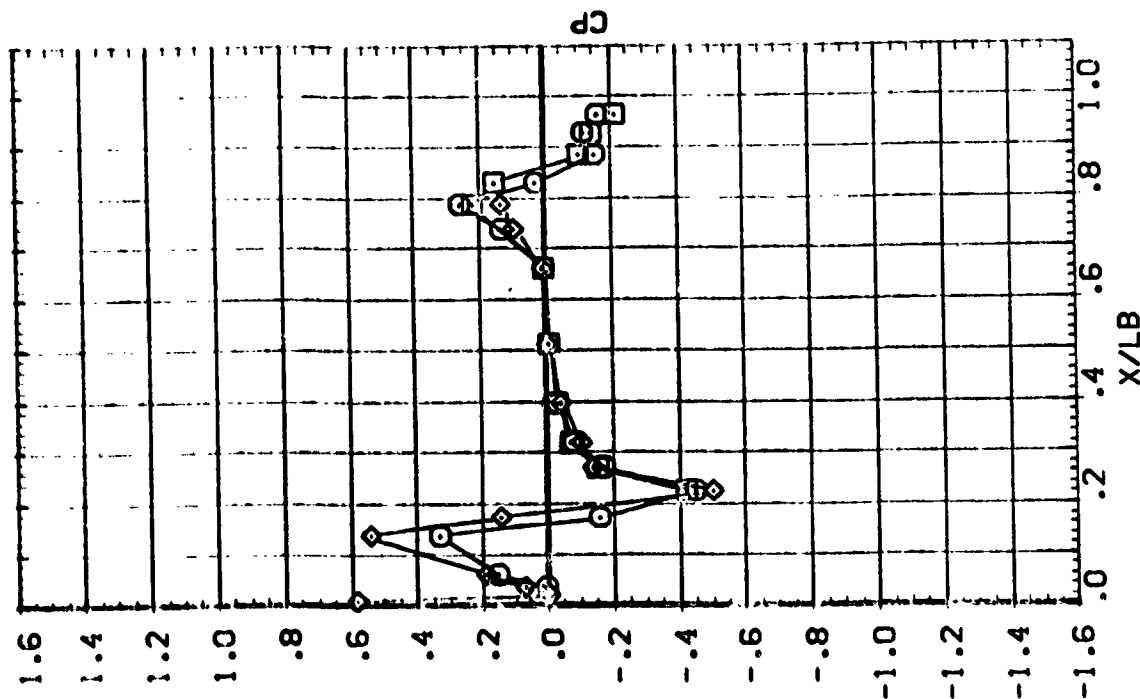
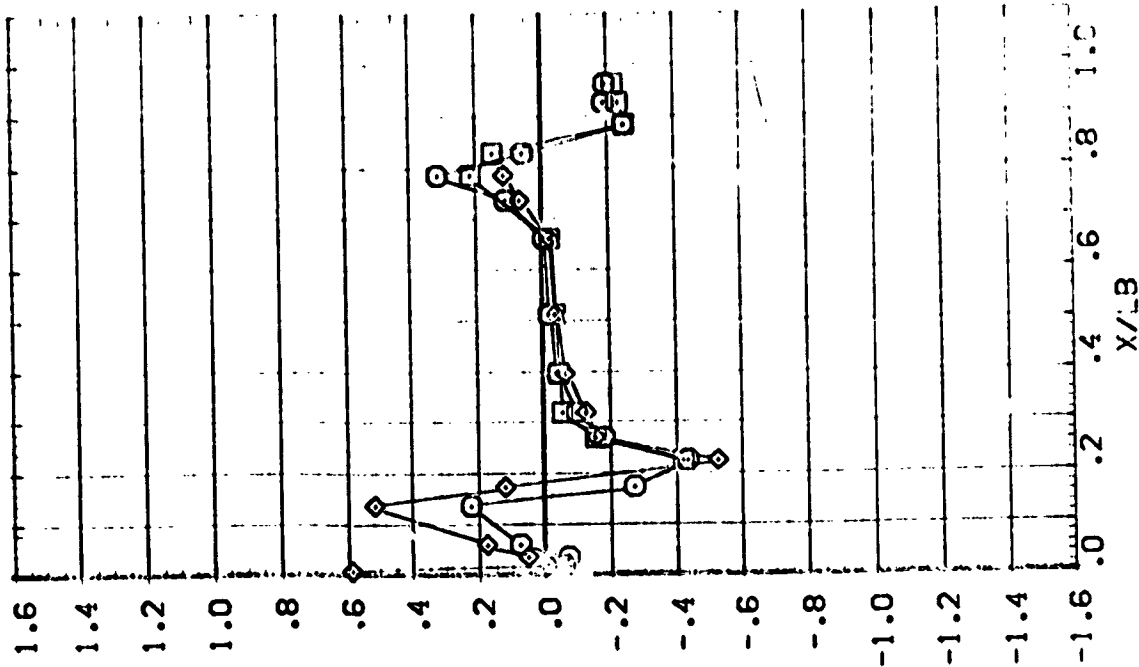
AVES 11-707 CA:2 C2A

ALPHA
ELEV

DRIVE/IDIC VALUES
R0000 R0000 R0000 R0000

BETA
WACH
R0000 R0000 R0000 R0000

SV222
R0000 R0000 R0000 R0000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBP334)

AVES 11-707 GA12 02A

SYMBOL
O
◇
△

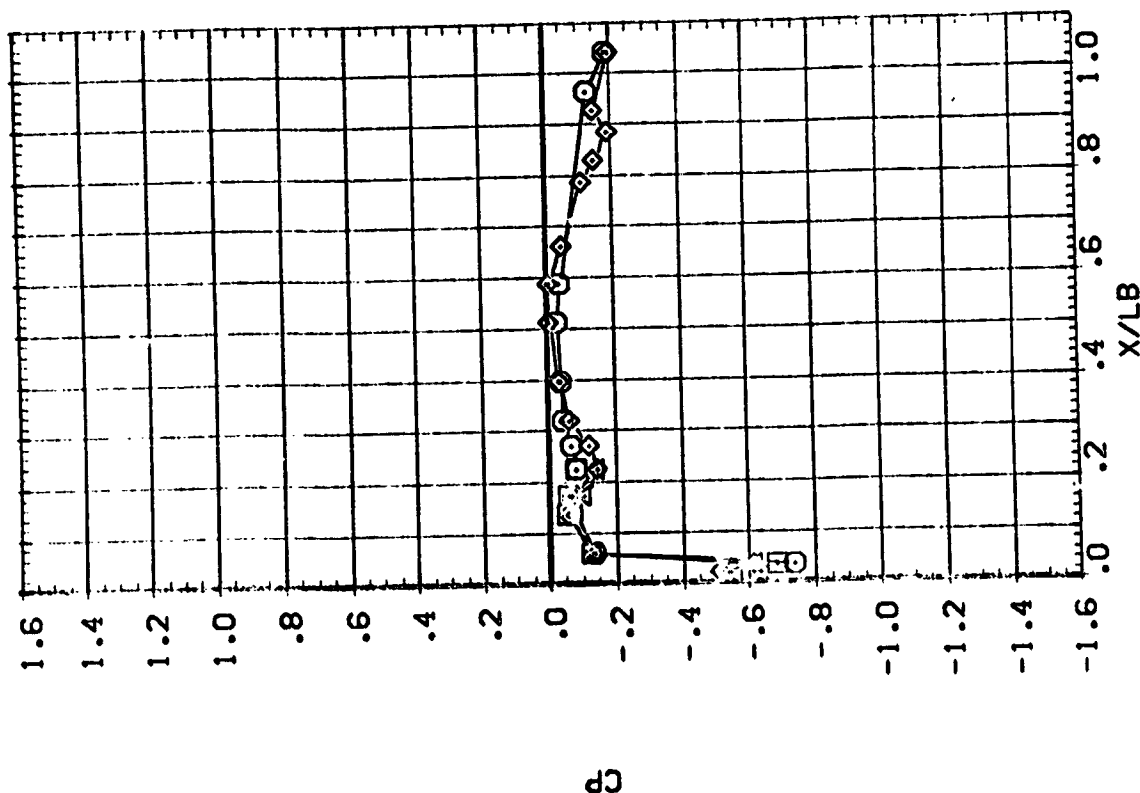
P-1
.000
20.000
40.000
55.000

BETA
8.3:0

MACH
.599

PARAMETRIC VALUES
.000
.000
.000
RUDDER
RUDDER
ELEVON

.000
40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBP834)

AVES : 1-707 0A12 02A

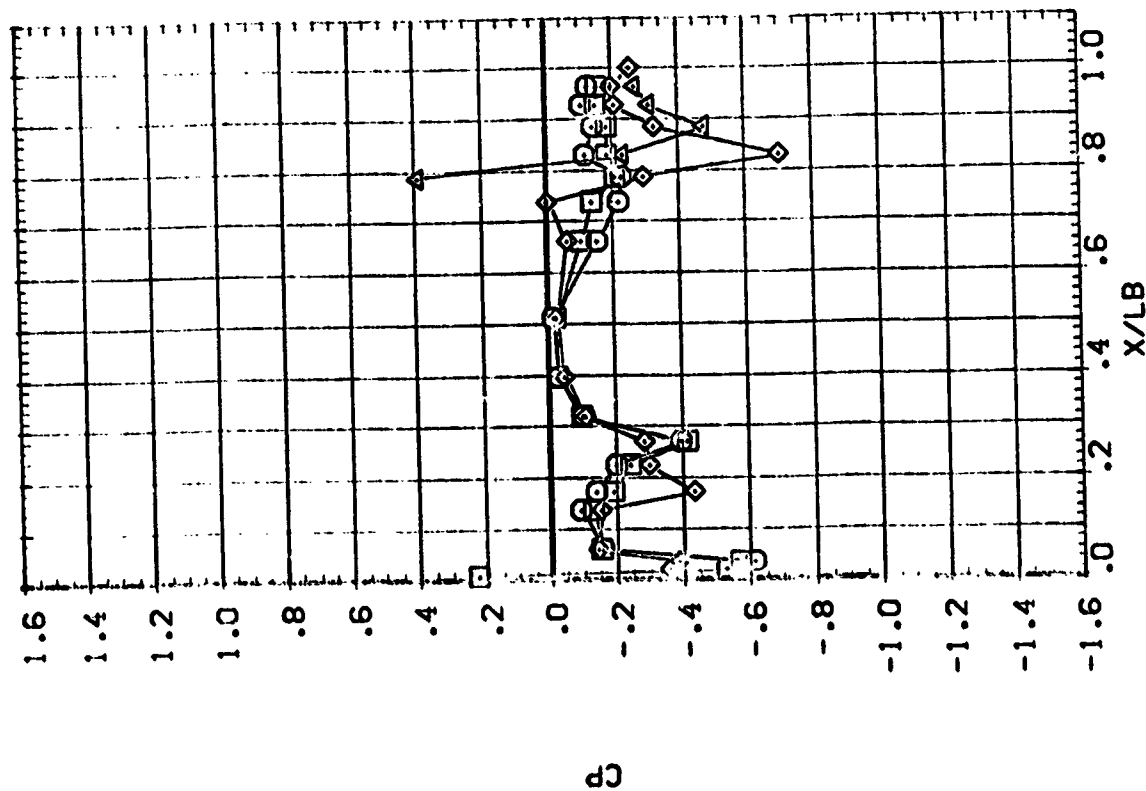
S-192
 75.000
 80.000
 120.000
 135.000

BETA
 8.310

MACH
 .599

PARAMETRIC VALUES
 ALPHA
 ELEVON

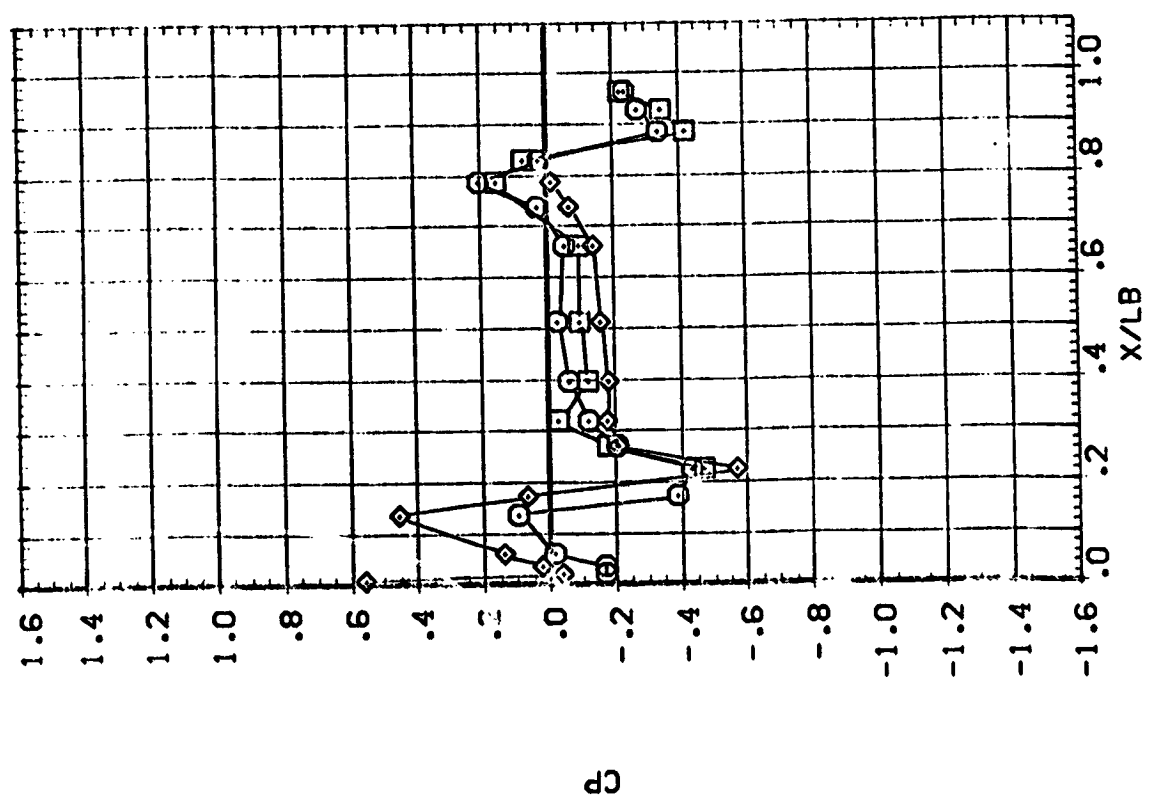
.000
 9.000
 40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

PARAMETRIC VALUES
ALPHA .000
ELEVON .000
RUDDER .000
PUFFER 40.000

SWGC-
P-1
:50.000
:65.000
:80.000
RETA 8.310
MACH .599



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

707
Jens

24. 25. 26. 27. 28.

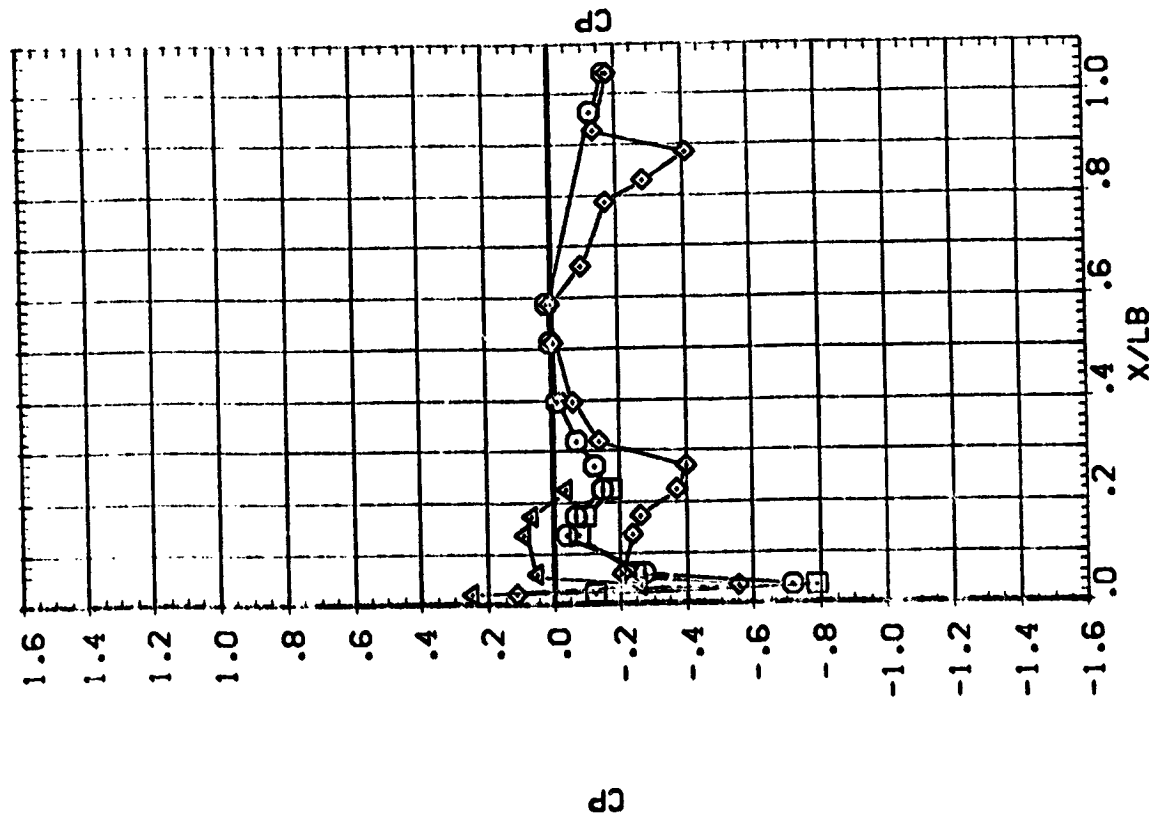
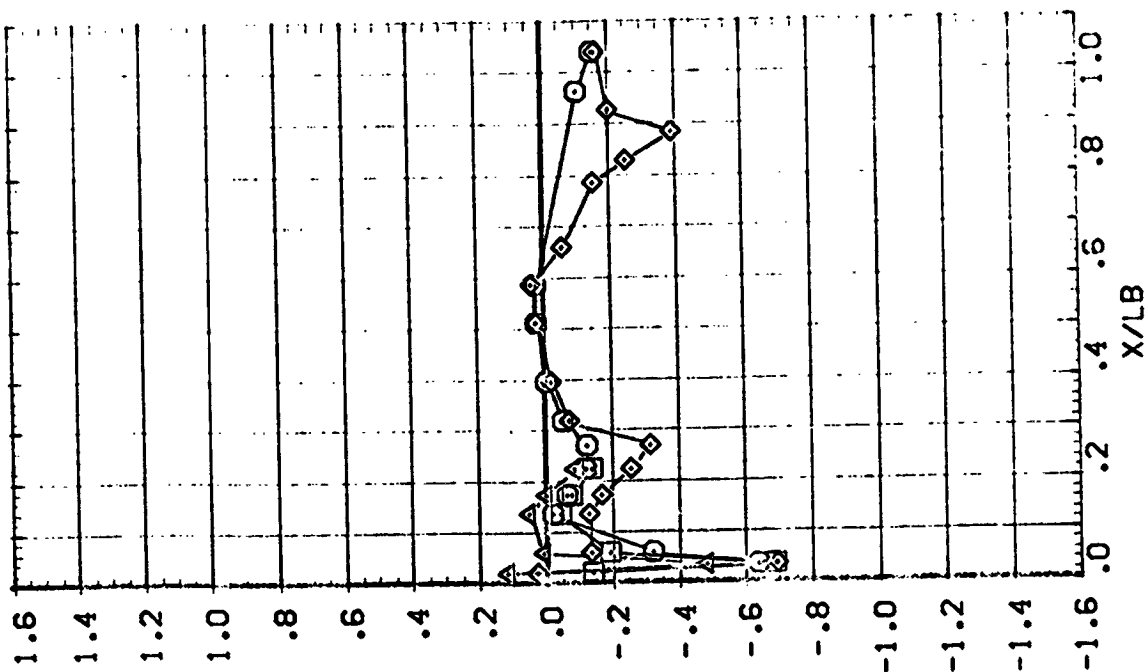
0:0:4-
00:18-
351A
MACH 898.

803
H364

803
H364

	PARAGRAPH VALUES	
ALPHA	.000	BETTER
BETTER	.000	BETTER
	40.000	

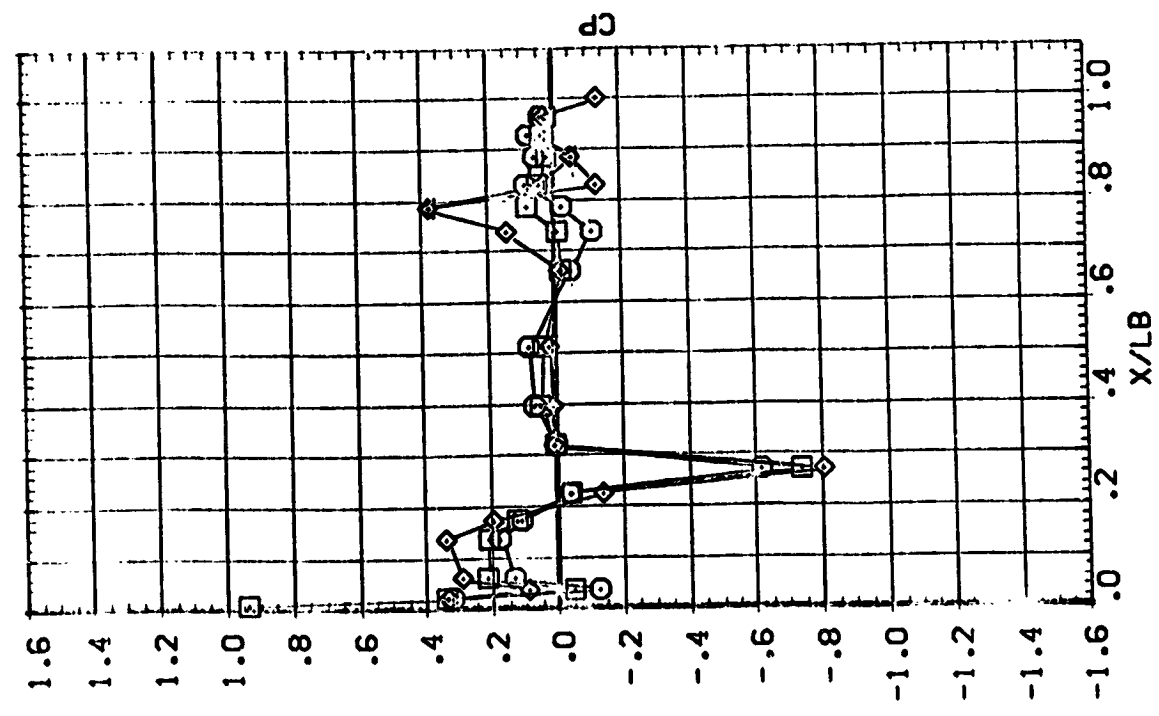
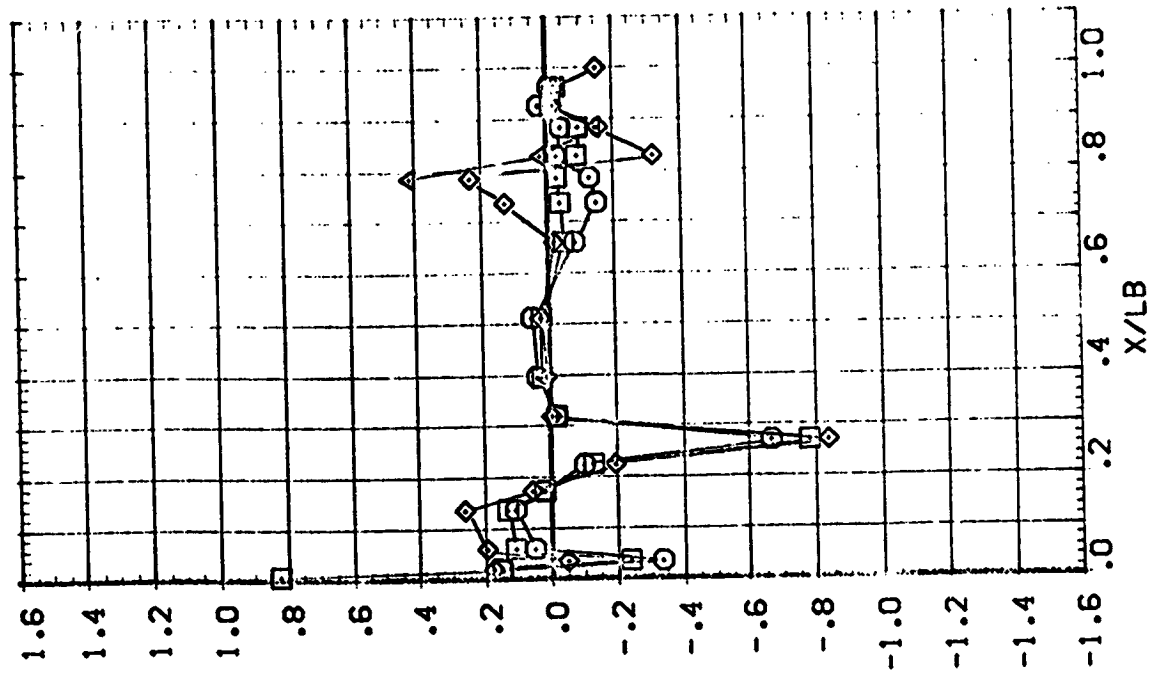
PARAGRAPH VALUES	
1	100.000
2	100.000
3	100.000
4	100.000
5	100.000
6	100.000
7	100.000
8	100.000
9	100.000
10	100.000
11	100.000
12	100.000
13	100.000
14	100.000
15	100.000
16	100.000
17	100.000
18	100.000
19	100.000
20	100.000
21	100.000
22	100.000
23	100.000
24	100.000
25	100.000
26	100.000
27	100.000
28	100.000
29	100.000
30	100.000
31	100.000
32	100.000
33	100.000
34	100.000
35	100.000
36	100.000
37	100.000
38	100.000
39	100.000
40	100.000
41	100.000
42	100.000
43	100.000
44	100.000
45	100.000
46	100.000
47	100.000
48	100.000
49	100.000
50	100.000
51	100.000
52	100.000
53	100.000
54	100.000
55	100.000
56	100.000
57	100.000
58	100.000
59	100.000
60	100.000
61	100.000
62	100.000
63	100.000
64	100.000
65	100.000
66	100.000
67	100.000
68	100.000
69	100.000
70	100.000
71	100.000
72	100.000
73	100.000
74	100.000
75	100.000
76	100.000
77	100.000
78	100.000
79	100.000
80	100.000
81	100.000
82	100.000
83	100.000
84	100.000
85	100.000
86	100.000
87	100.000
88	100.000
89	100.000
90	100.000
91	100.000
92	100.000
93	100.000
94	100.000
95	100.000
96	100.000
97	100.000
98	100.000
99	100.000
100	100.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

PARAMETRIC VALUES
 ALPHA .000
 ELEVON .000
 RUDDER .000
 RUDER 40.000

SVGZ-
 70.000
 90.000
 120.000
 150.000
 BETA -8.100
 MACH .899
 -4.010



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

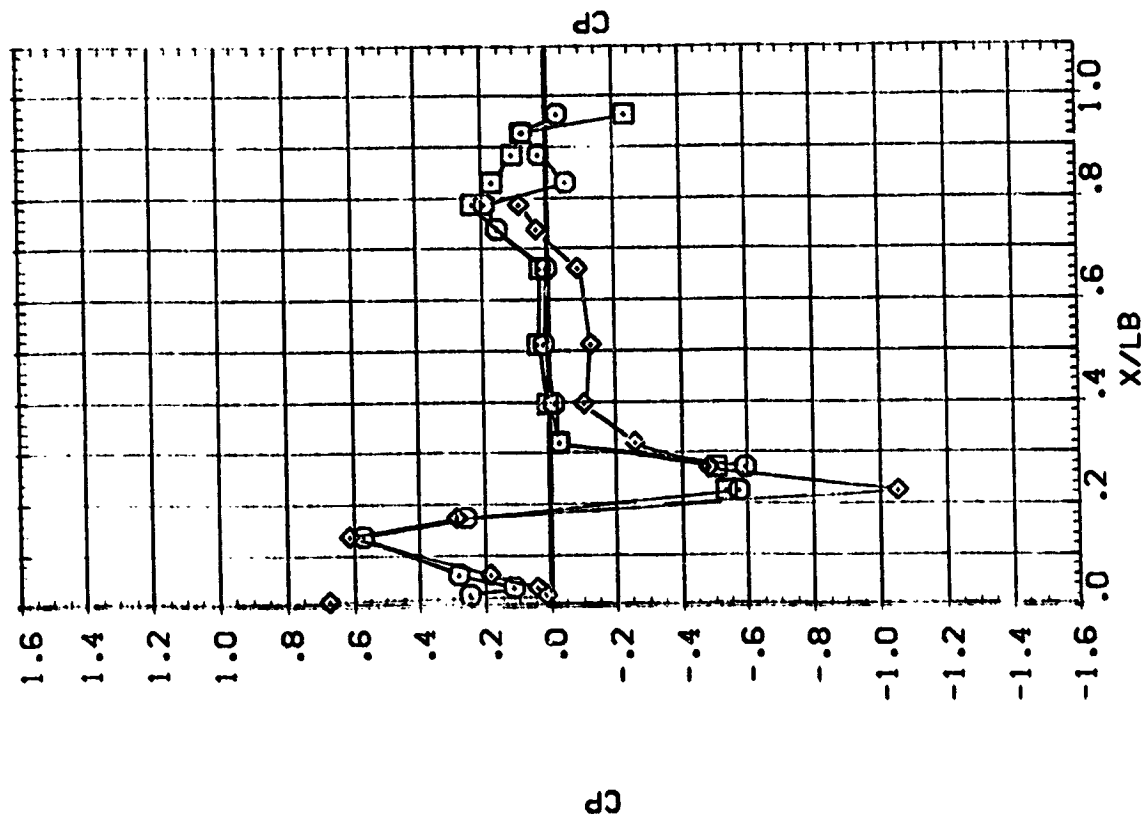
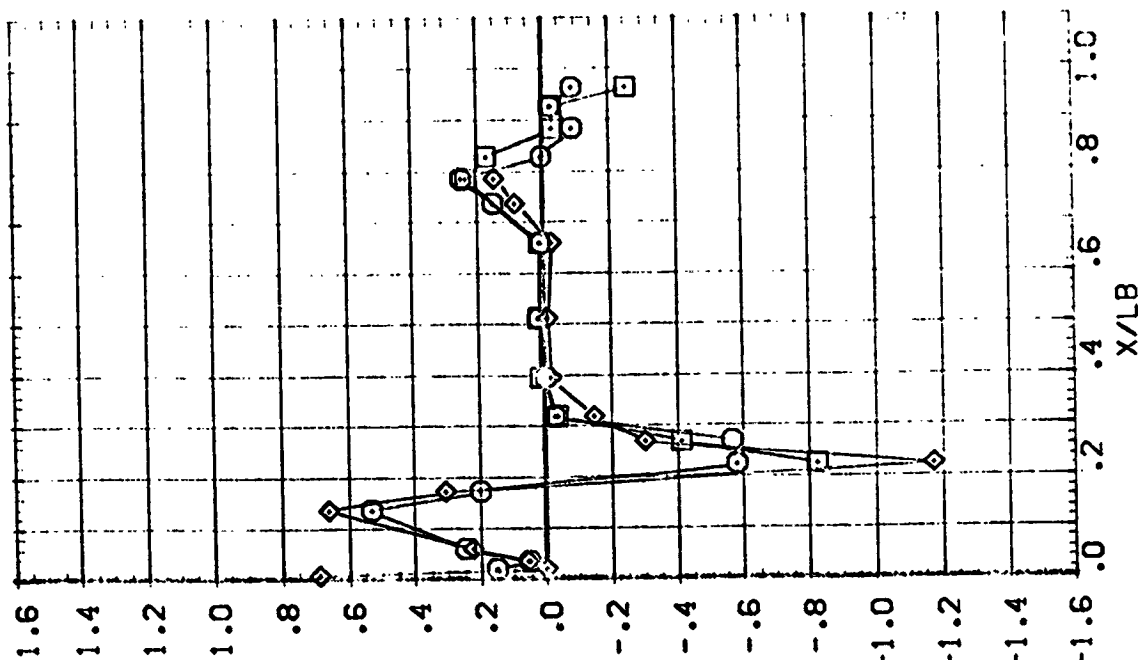
ORBITER FUSELAGE (RBPB34)

AVES 11-707 0A12 02A

SYMBOL
○
□
◇

PA1 BETA MACH
150.000 -8.100 .889
165.000 -4.010
180.000

PARAMETRIC VALUES
ALPHA .000 .000 .000
ELEVON .000 .000 .000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

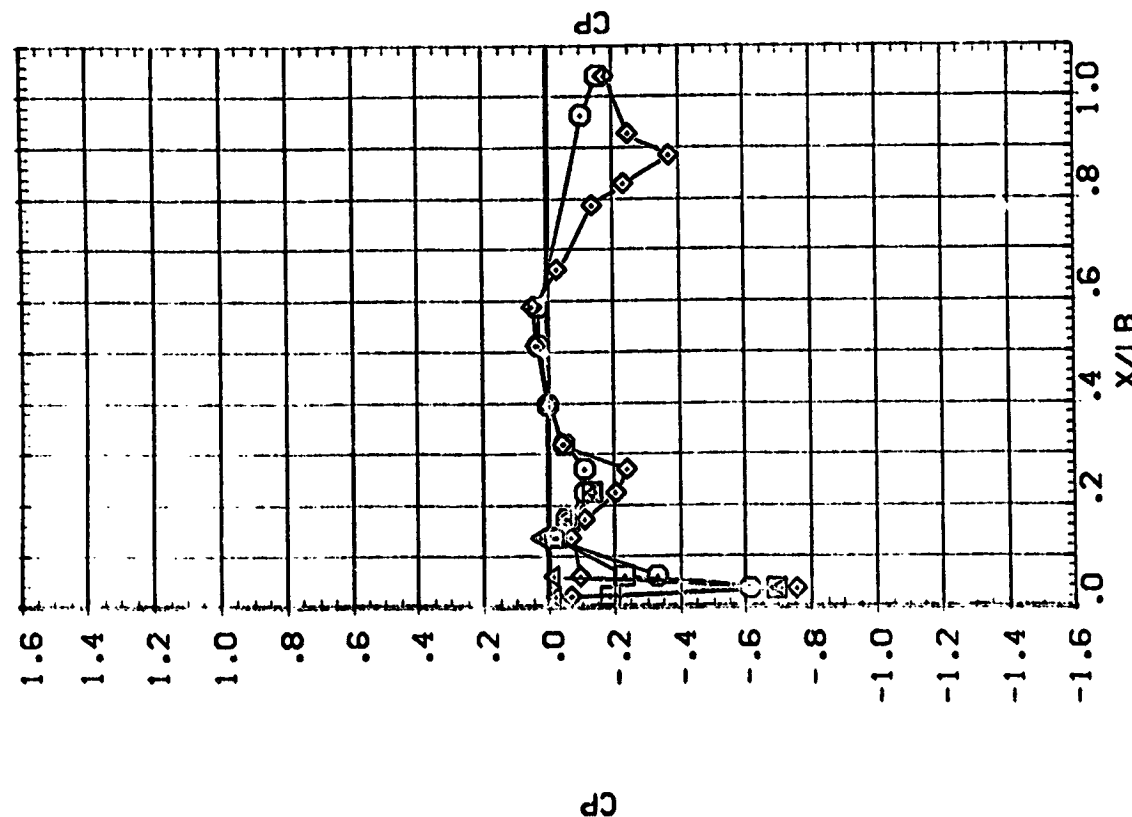
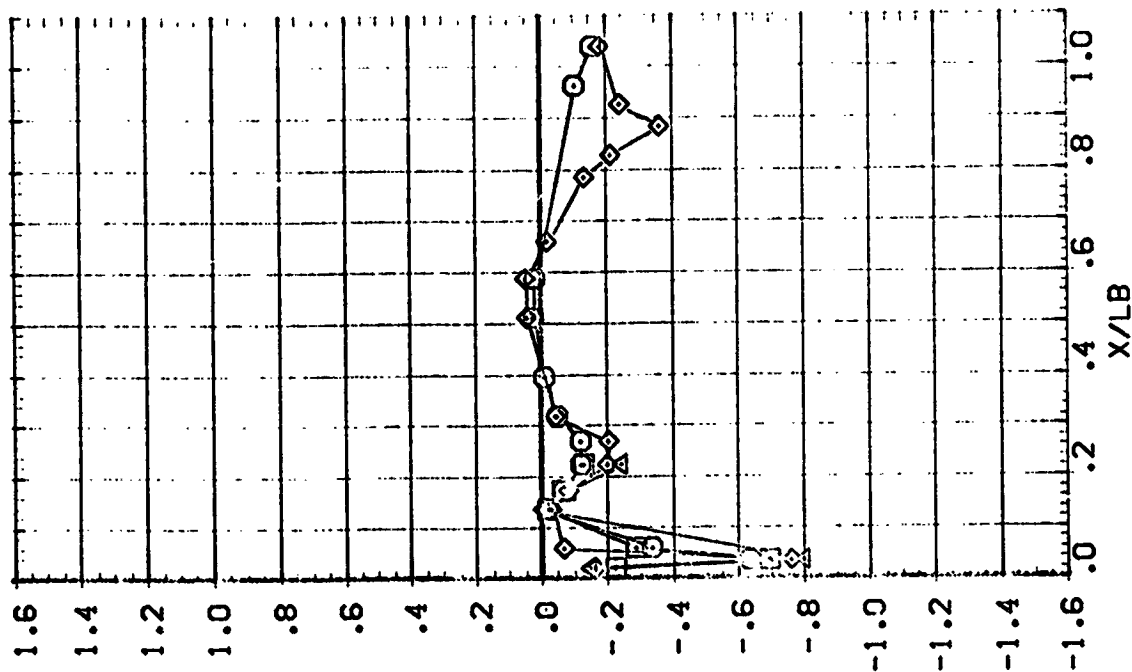
ORBITER FUSELAGE (R3PB34)

AVES 11-707 3A:2 02A

PARAMETRIC VALUES
 .000 RUDER .000
 .000 RUDER 40.000

SVABC
 .000
 20.000
 40.000
 55.000

PE TA VACH
 .080 .898
 4.750



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

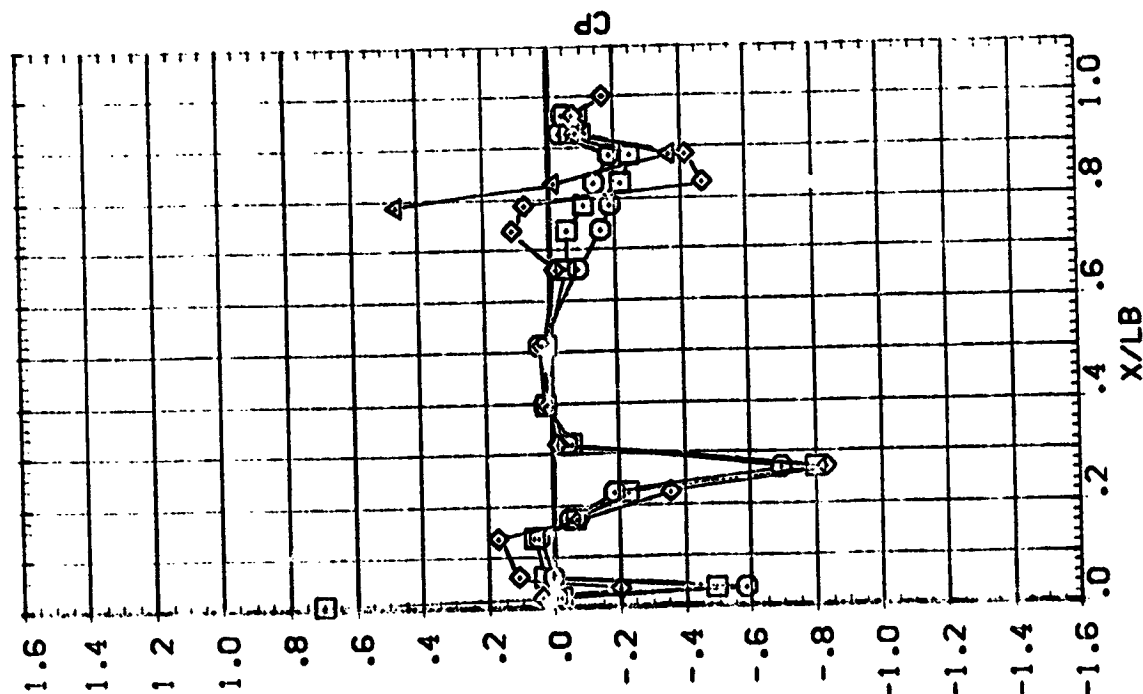
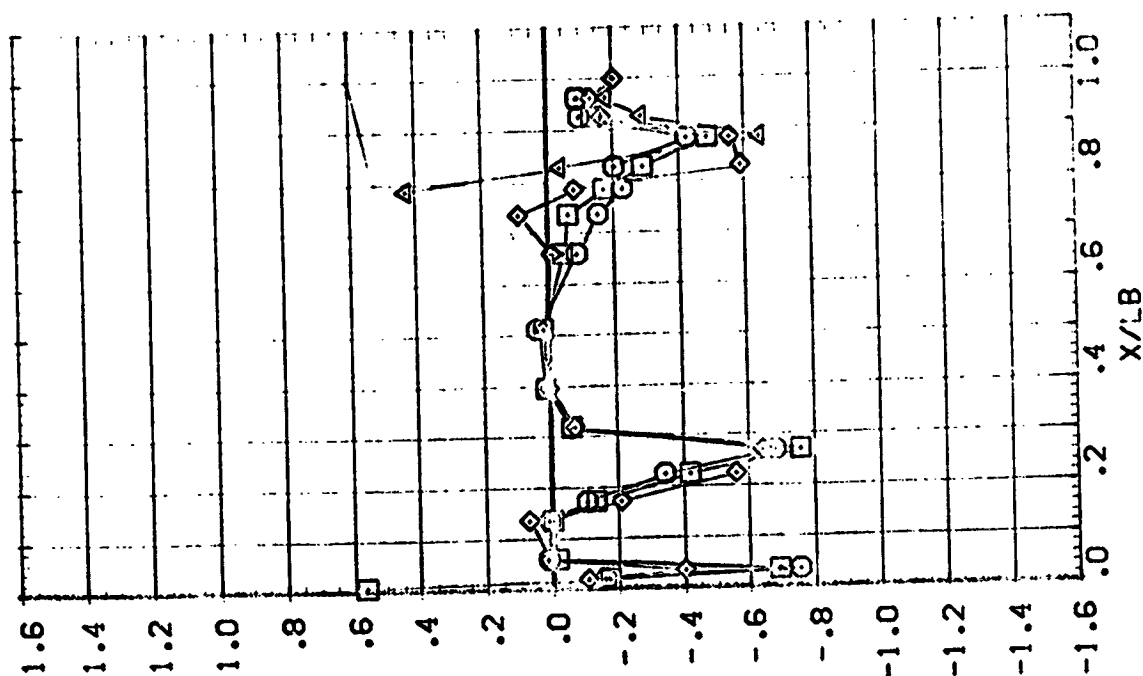
ORBITER FUSELAGE (R8P334)

AVES 11-707 0A12 C2A

SYNOPSIS
 ()
 ◇
 △

BETA MACH
 .080 .898
 4.250

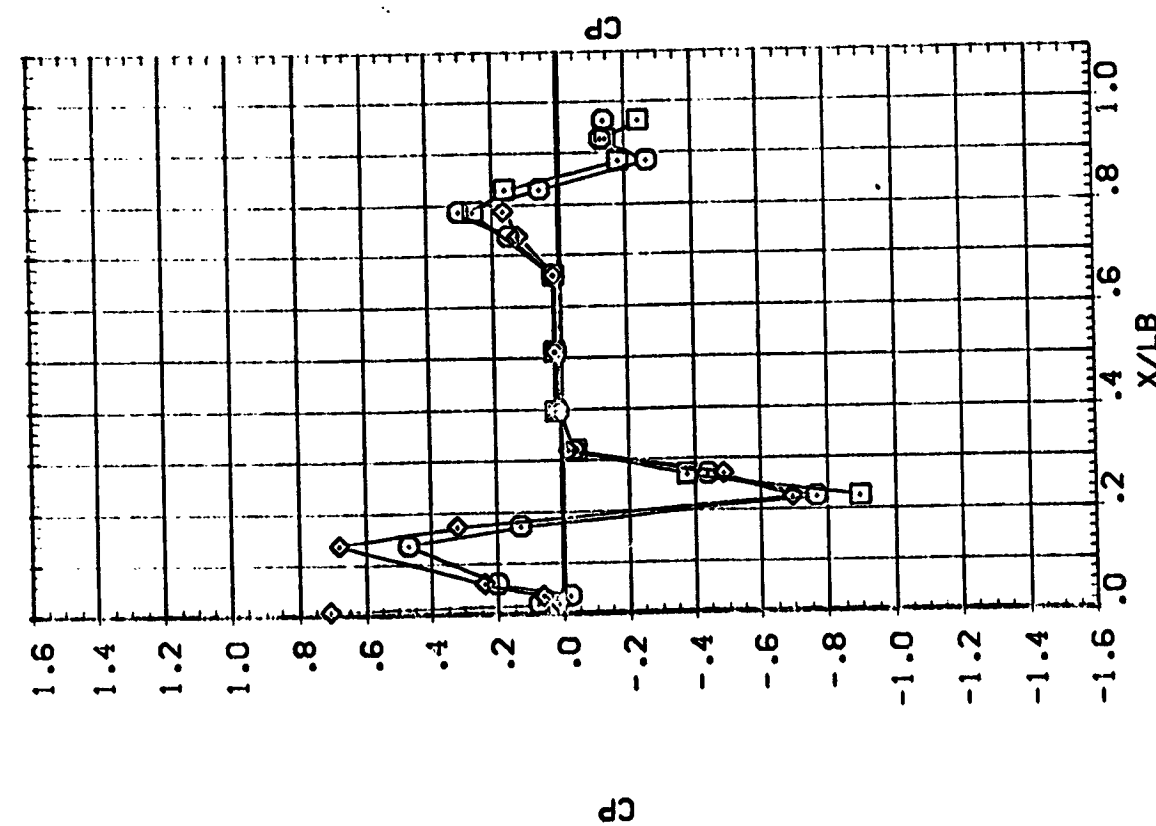
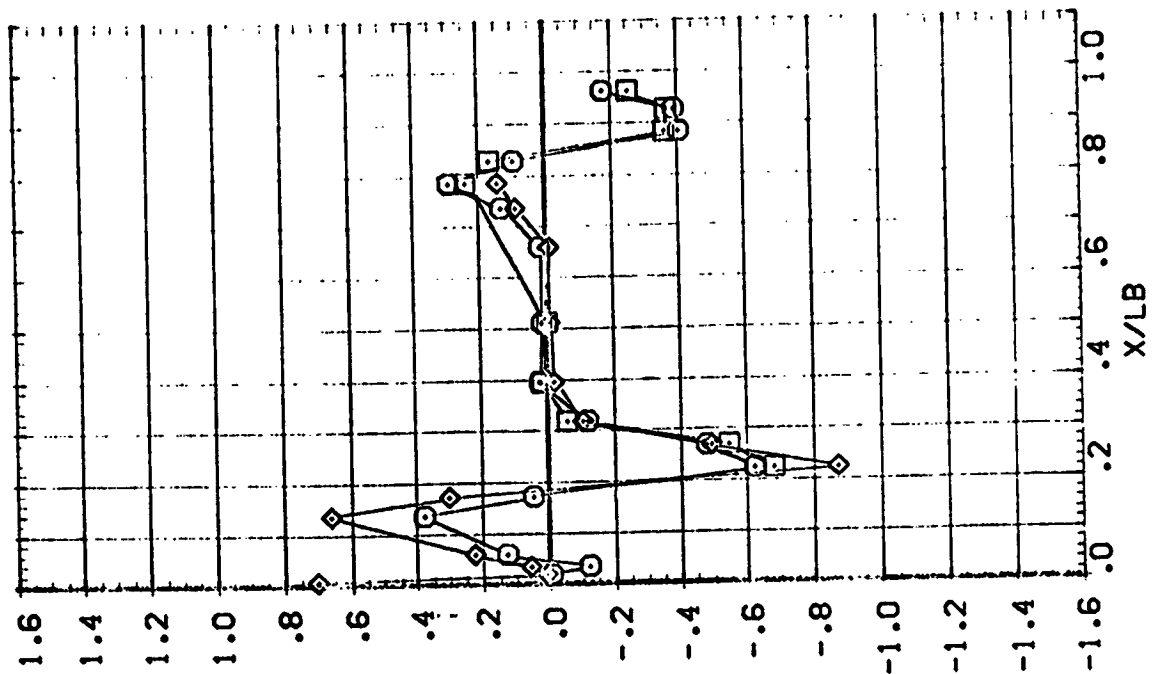
PARAMETRIC VALUES
 .000 .000 .000
 .000 .000 .000
 .000 .000 .000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

PARAMETRIC VALUES
 ALPHA .000
 ELEVON .000
 RUDDER .000
 RUDDER 40.000

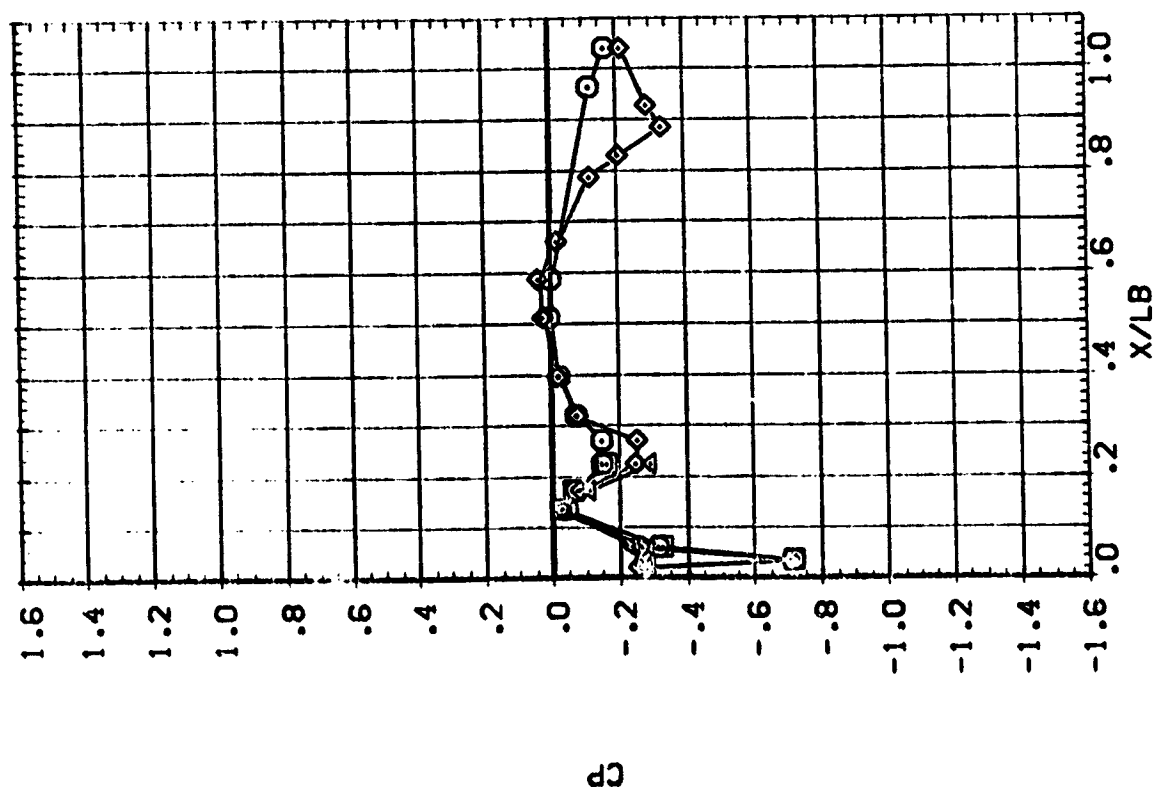
SWAG-
 P-1
 150.000
 165.000
 180.000
 195.000
 BETA .080
 MACH .898
 4.250



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ALPHA	.000	2.000	4.000
ELEVEN	.000	2.000	4.000

SYMBOL	PM:	BE7A	106
0000	.000	8.432	106
0001	20.000		
0002	40.000		
0003	55.000		

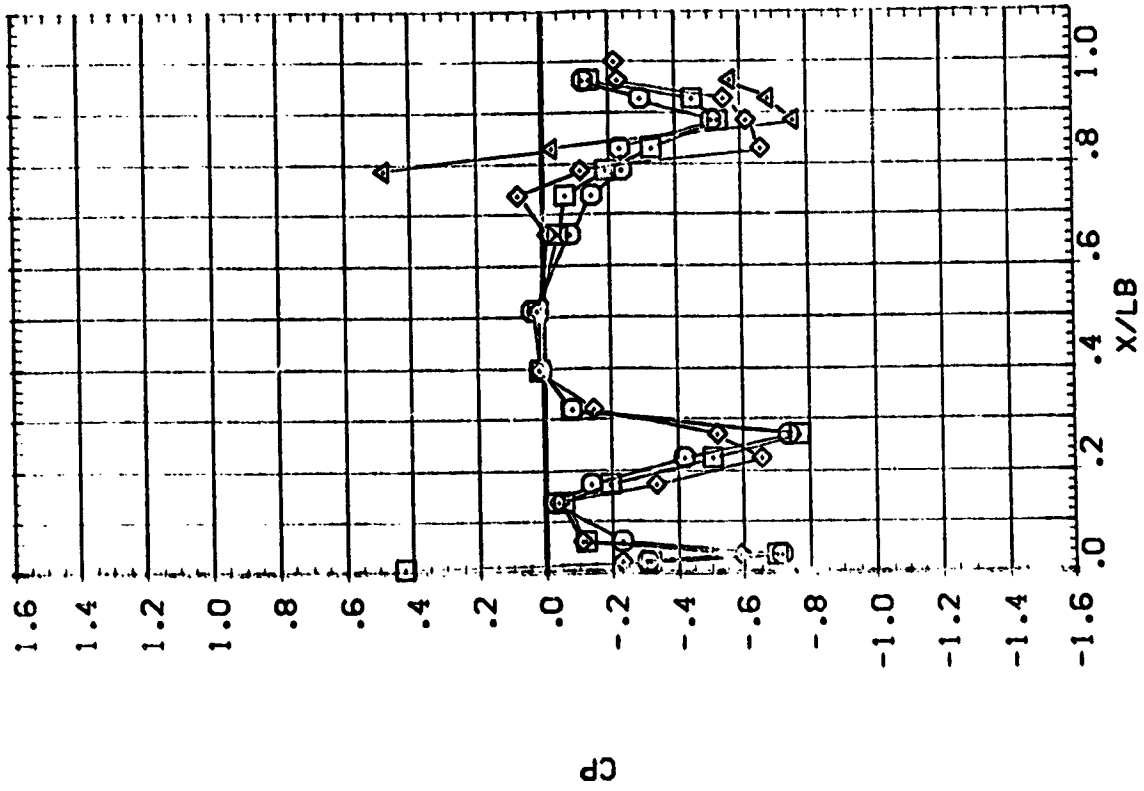


LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

AVES ::-707 3A12 02A

PARAMETER VALUES	
ALPHA	.000
NOA573	2.000
	2.000
	40.000

STATION	DATE	TIME	WAVE
5430	72.000	8.430	WAVE
5430	72.000	8.430	WAVE



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBP334)

AVES : -707 CA12 02A

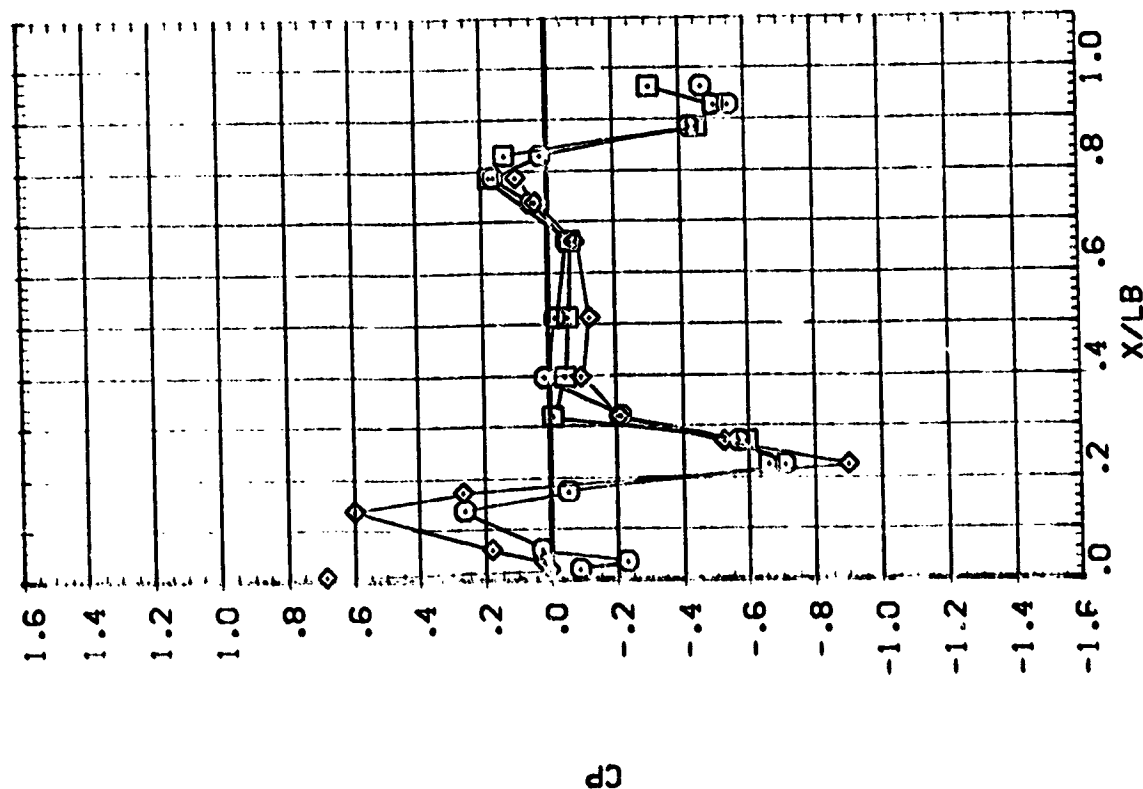
SYMBOL
 150.000
 165.000
 180.000

BE'A 8.430 MACH .901

PARABOLIC VALUES
 .000 9.0000
 .000 9.0000
 .000 9.0000

ALPHA
 ELEVON

.000
 40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES



7
O
O
O
O

SEAS

VE/M
.269
.354
.427
.534

ALPHA
-4.410
.030

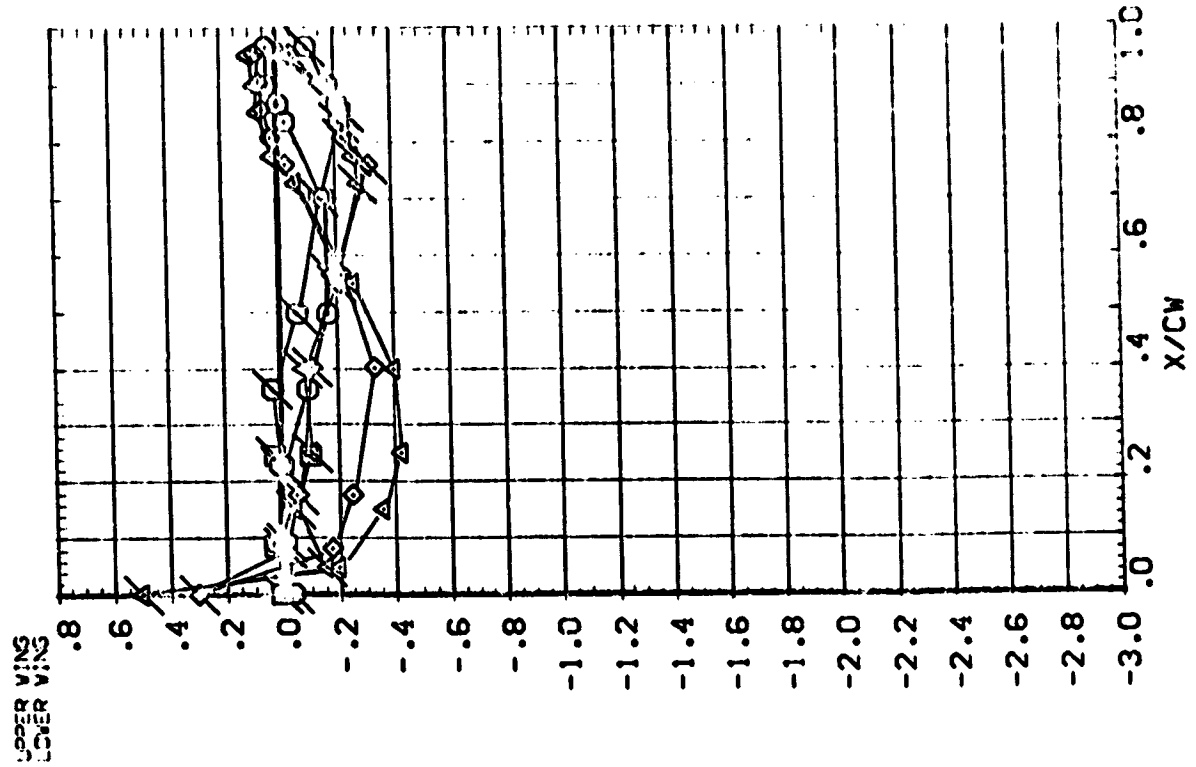
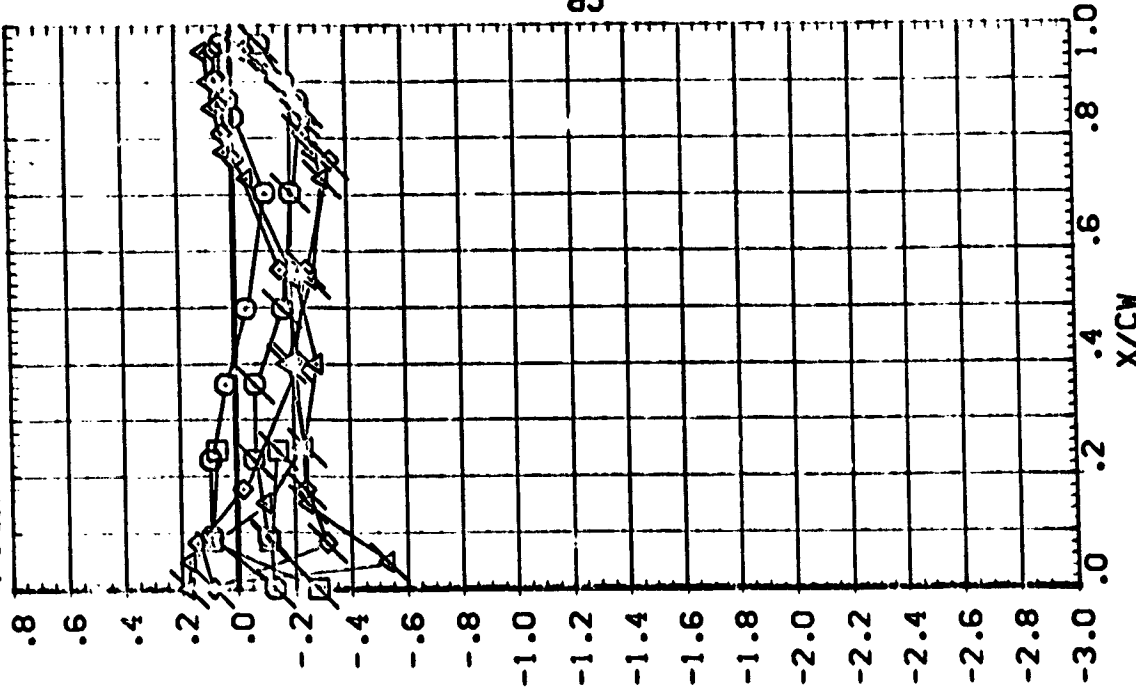
MACH
.600

PARAMETRIC VALUES

BETA
ELEVON

.000
.000
.000
.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
[REP-01] OPEN AXES 11-707 CA12 32A
[REP-01] FLAGGED AXES 11-707 CA12 32A

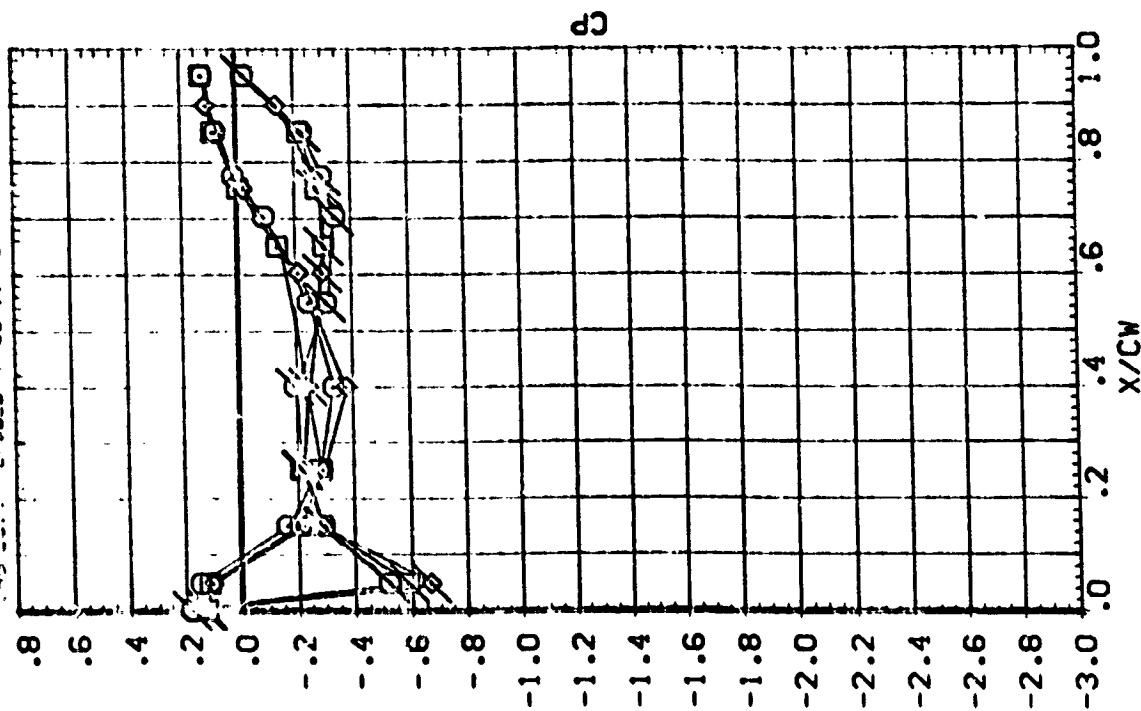


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

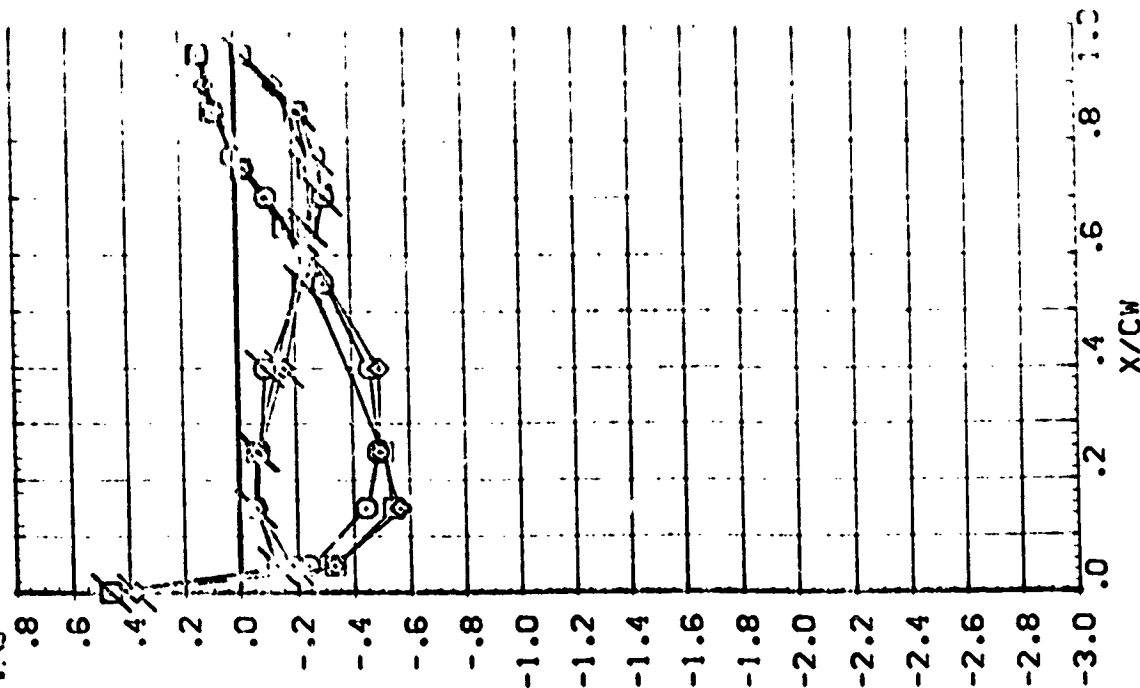
256-5	v/B	A-D-A	MAG-7
0110	.673	-4.4:C	.603
0110	.78C		.733
0110	.887		

0110
JERAS

DATA SET	SYNOPSIS	CONFIGURATION	DESCRIPTION
PROD	PROD	AMES 11-707	CA12 07A
PROD	PROD	AMES 11-707	CA12 02A



22
22
22
22
22

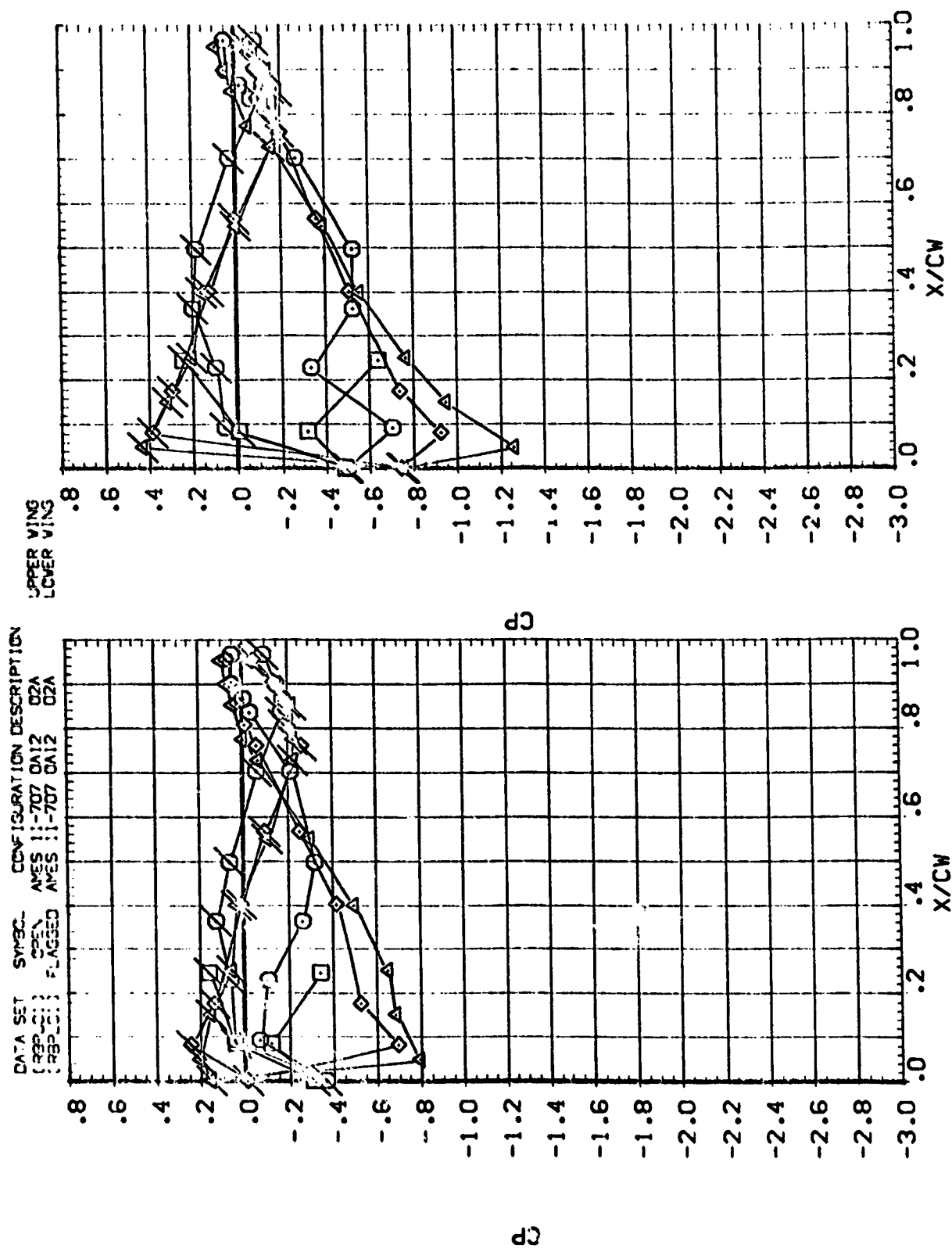


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

10

DETA
ELEVEN

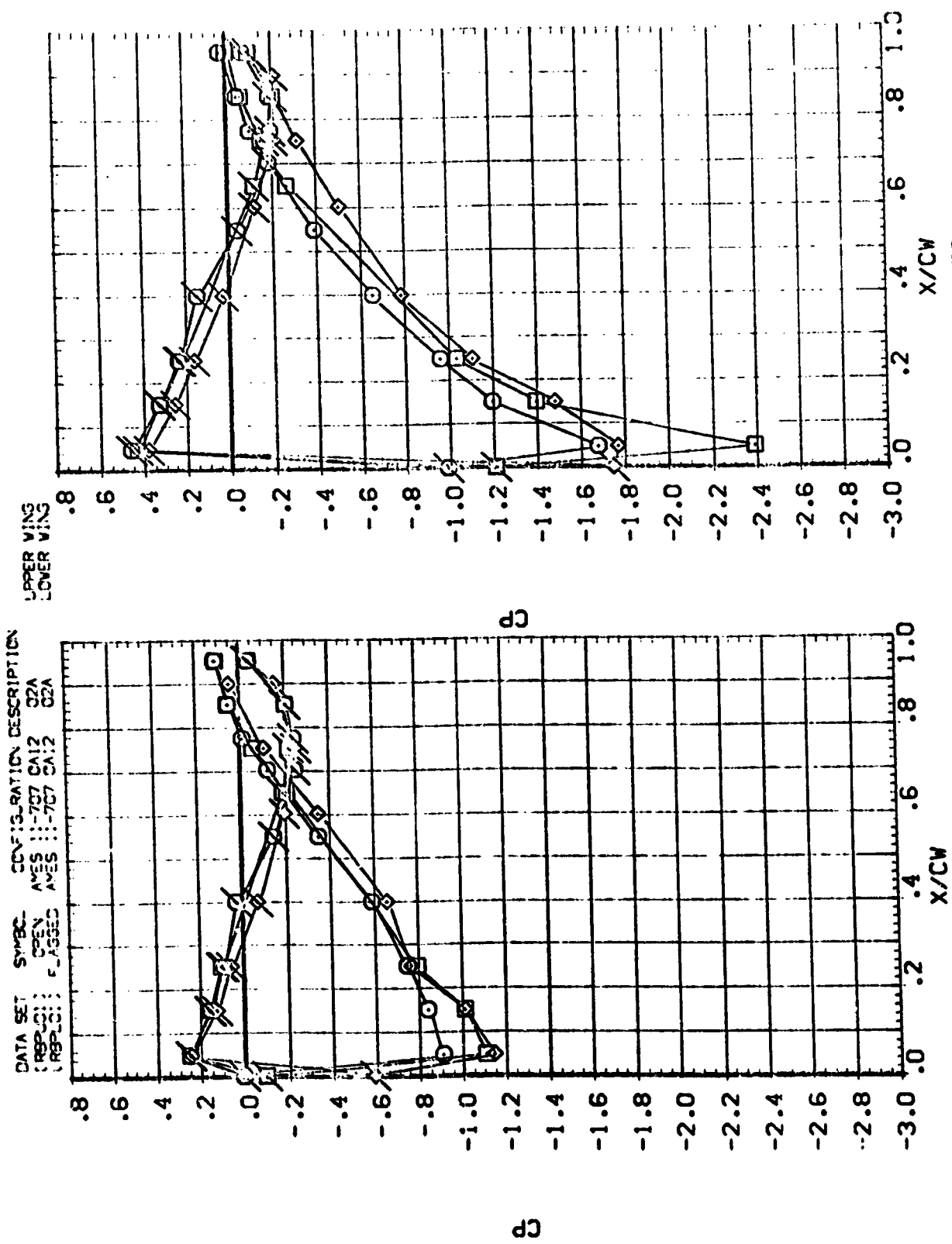
Y/B ₀	V/A	W/H
0.799	5.033	.603
0.364	0.343	
0.477		
0.534		



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

00016

.780 10.040
.887





SYMBOL
□
◇
△

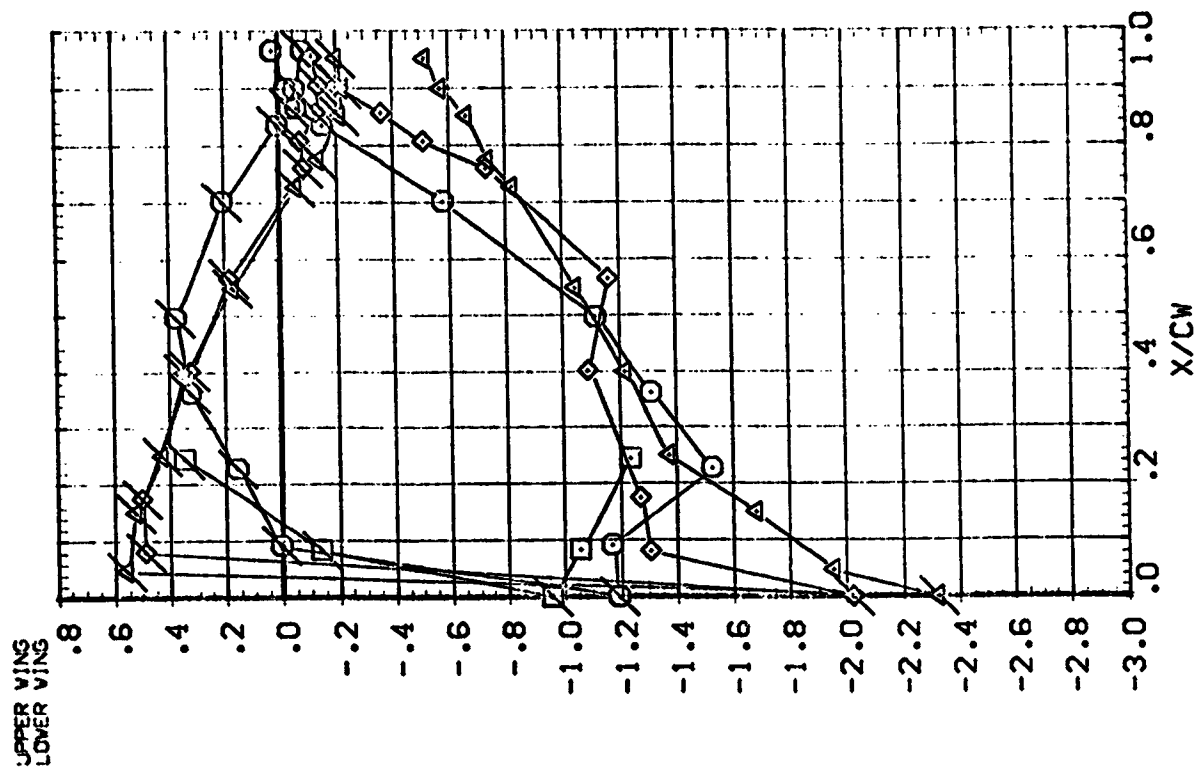
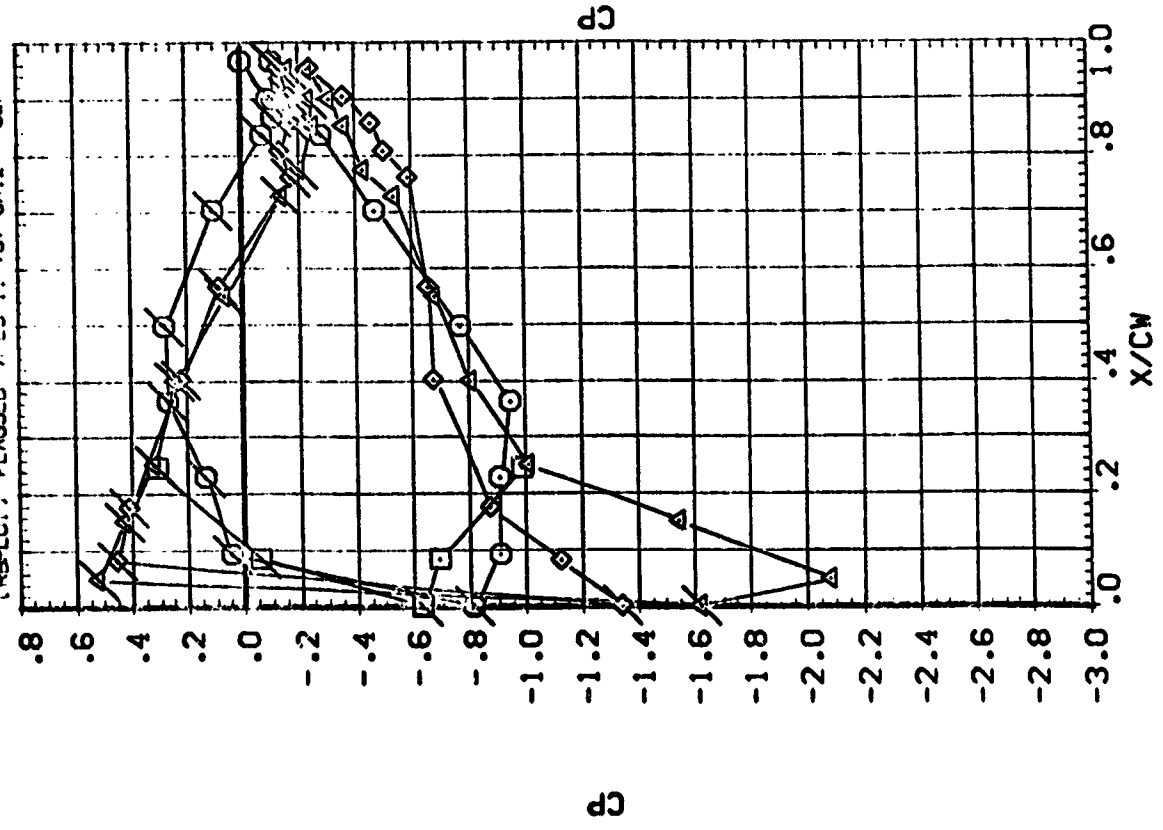
Y/BN
.299
.364
.427
.534

ALPHA
15.020
20.000

MACH
.600

PARAMETRIC VALUES
BETA
ELEVON
.000
RUDDER
.000
RUDFLR
.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
(RBPLO) OPEN AXES 1:-707 CA:2 C2A
(RBPLO) FLAGGED AXES 1:-707 CA:2 C2A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

SYMBOL
○ □ ◇

Y/BN
.673
.780
.887

ALPHA
15.02C
20.00C

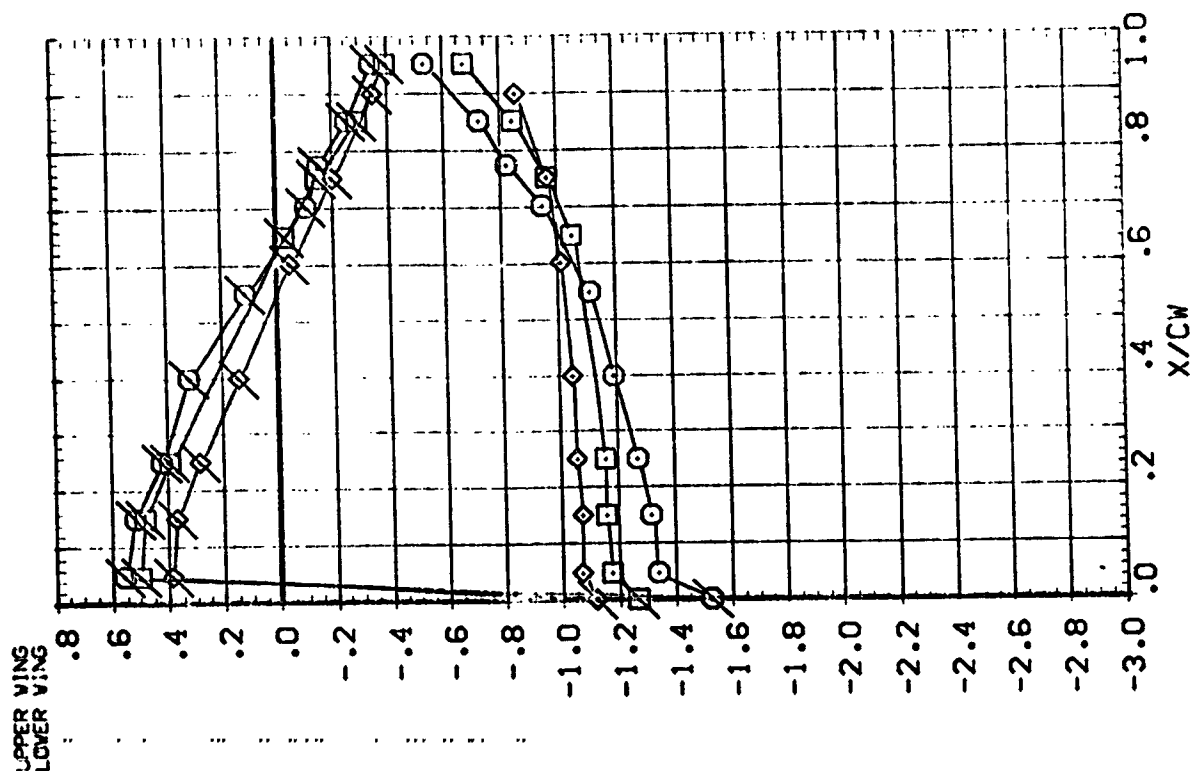
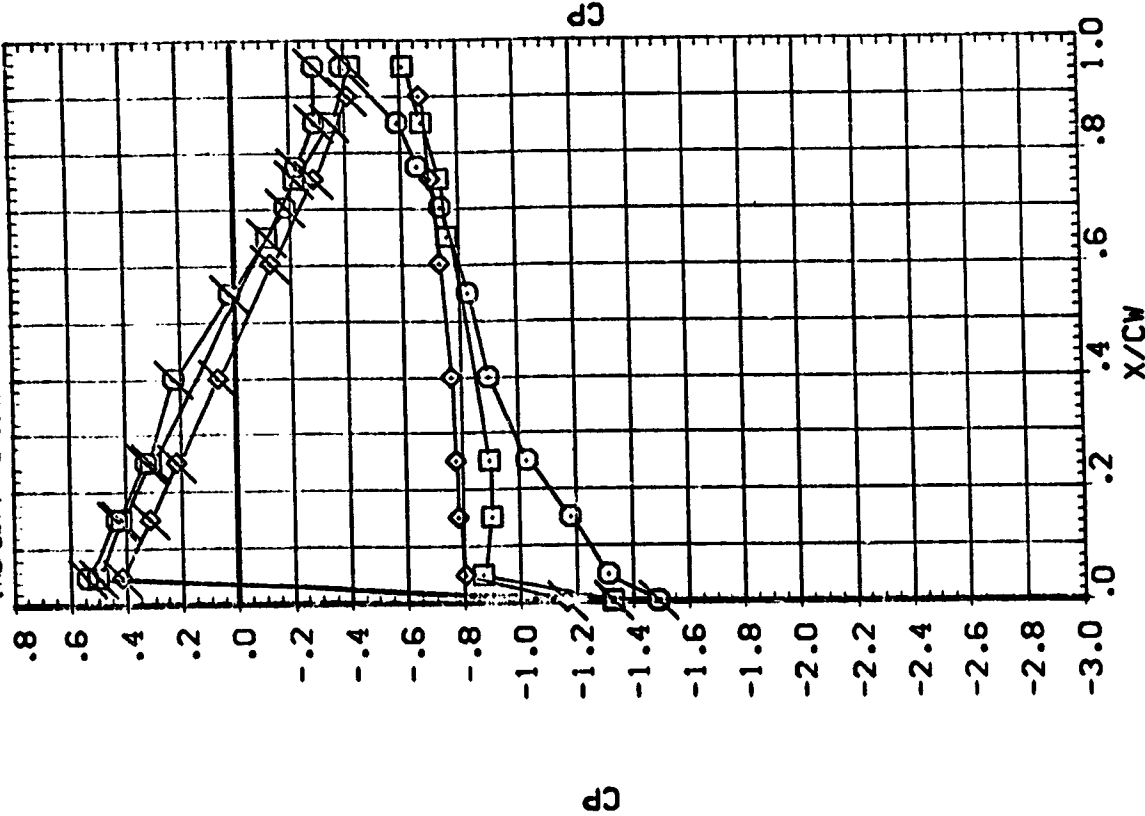
MACH
.600

PARAMETRIC VALUES
BETA
ELEVON

.000
.000
.000

RUDER
RUDER

DATA SET SYMBOL CONFIGURATION DESCRIPTION
(RSP-D1) OPEN AYES 11-707 CA12 02A
(RSP-D1) FLAGGED AYES 11-707 CA12 02A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

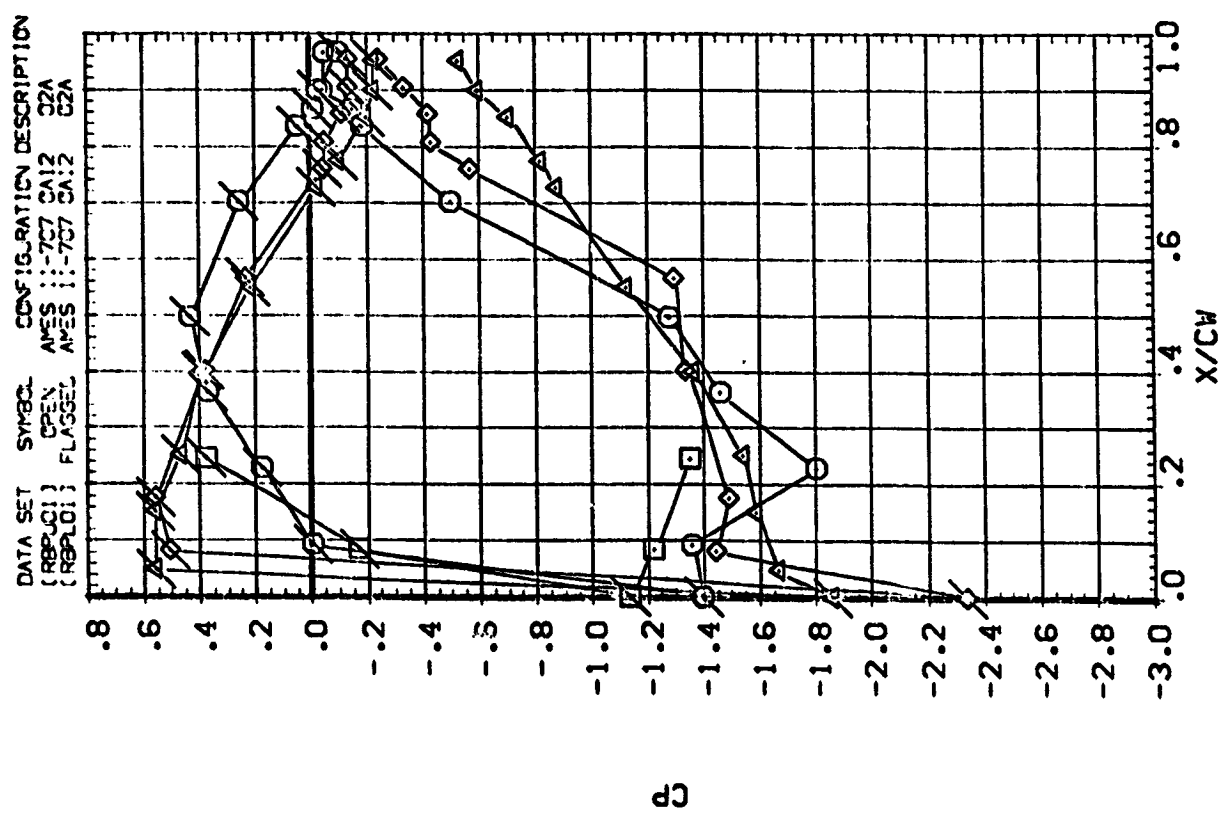
PARAMETRIC VALUES
 .000 R.UOER
 .000 R.UOFLR

BETA
 ELEVON

Y/BN ALPHA MACH
 .299 22.580 .600
 .364
 .427
 .534

SYMBOL
 □
 ◇
 △

UPPER WING
 LOWER WING

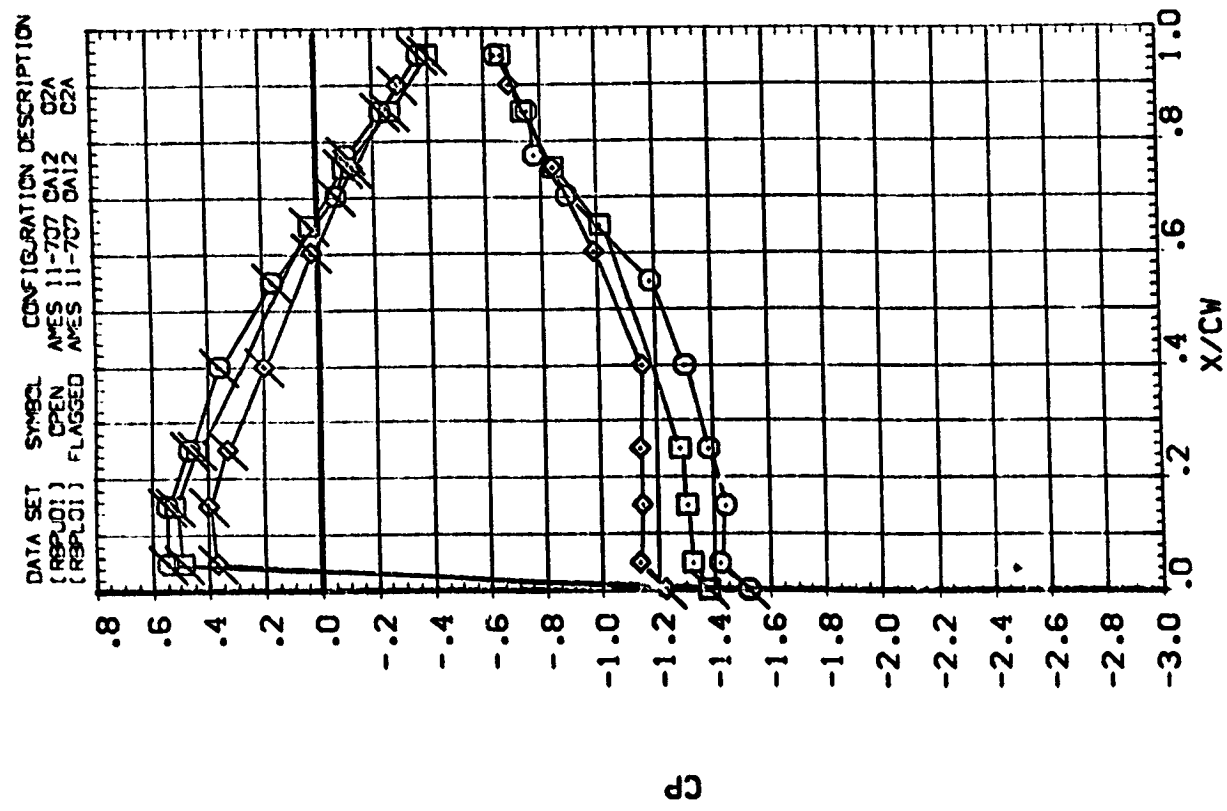


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 .000 RUDGER
 .000 RUDFLR
 .000

BETA
 ELEVON

UPPER WING
 LOWER WING



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

SYMBOL
 ○ □ △

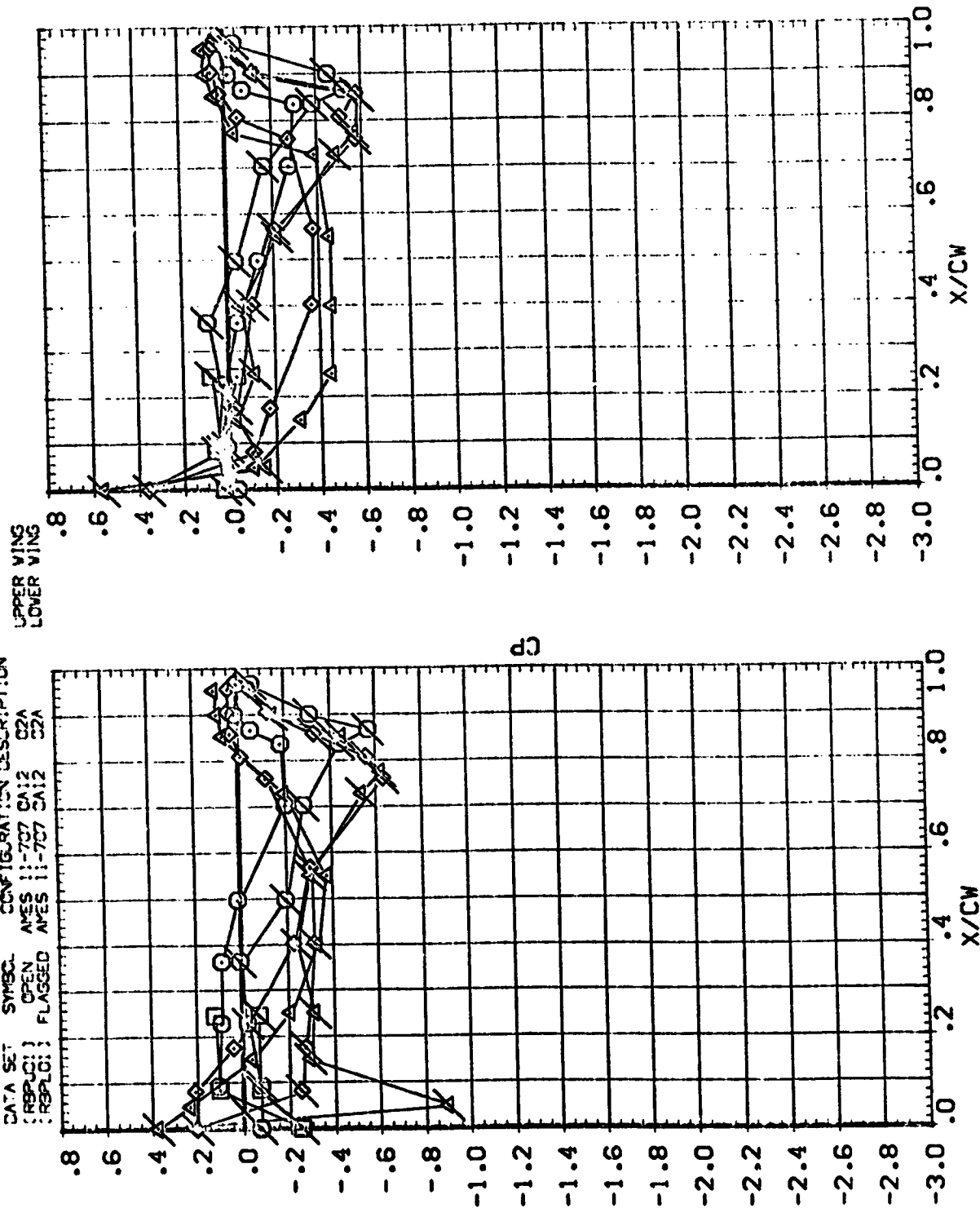
V/BN .299
 .364
 .427
 .534

ALPHA -4.560
 -0.010

MACH .905

PARAMETRIC VALUES
 BETA .000
 ELEVON .000
 RUDDER .000
 RLDFLR .000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RPLD) OPEN APES 11-707 CA12 C2A
 (RPLD) FLAGGED APES 11-707 CA12 C2A

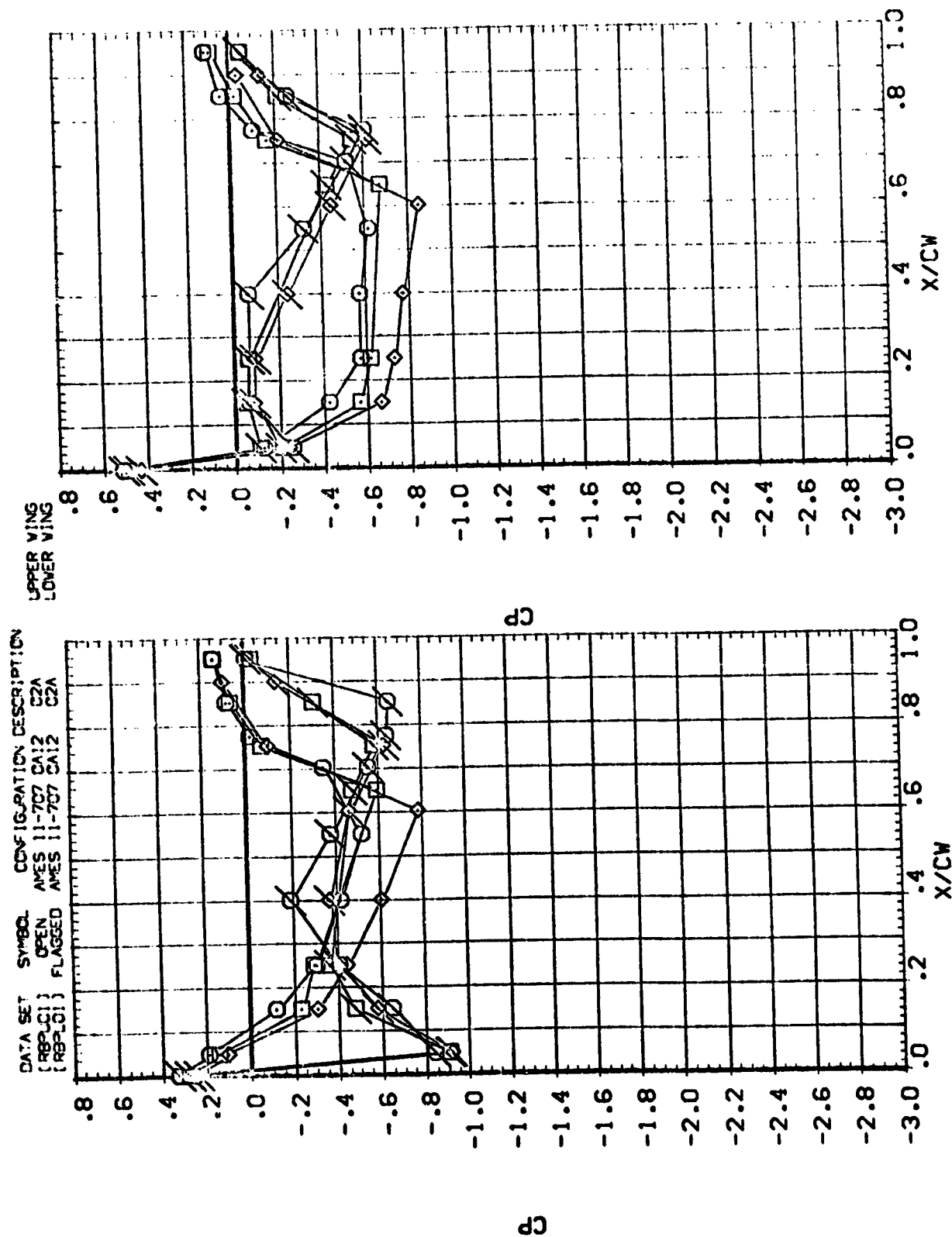


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

SYMBOL Y/BV ALPHA MACH
 .573 -4.560 .905
 .78C -0.010
 .887

BETA ELEVON
 .000 .000
 .000 .000
 .000 .000

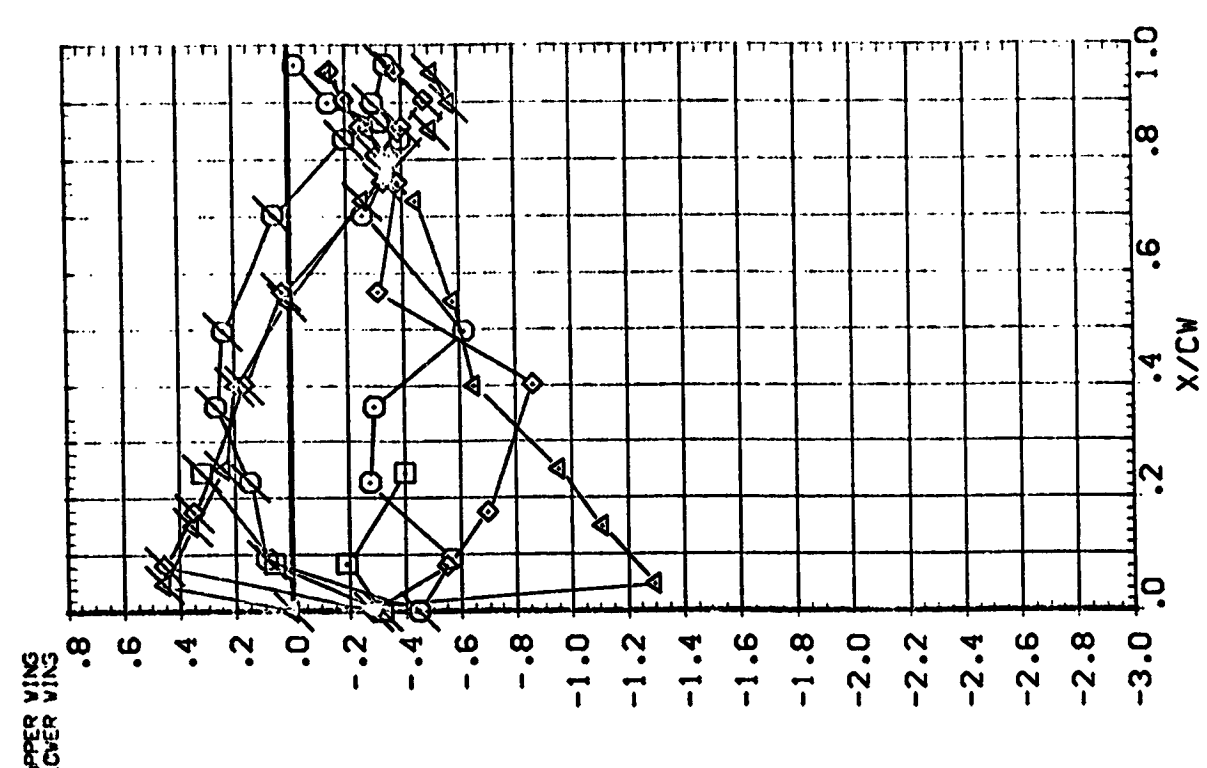
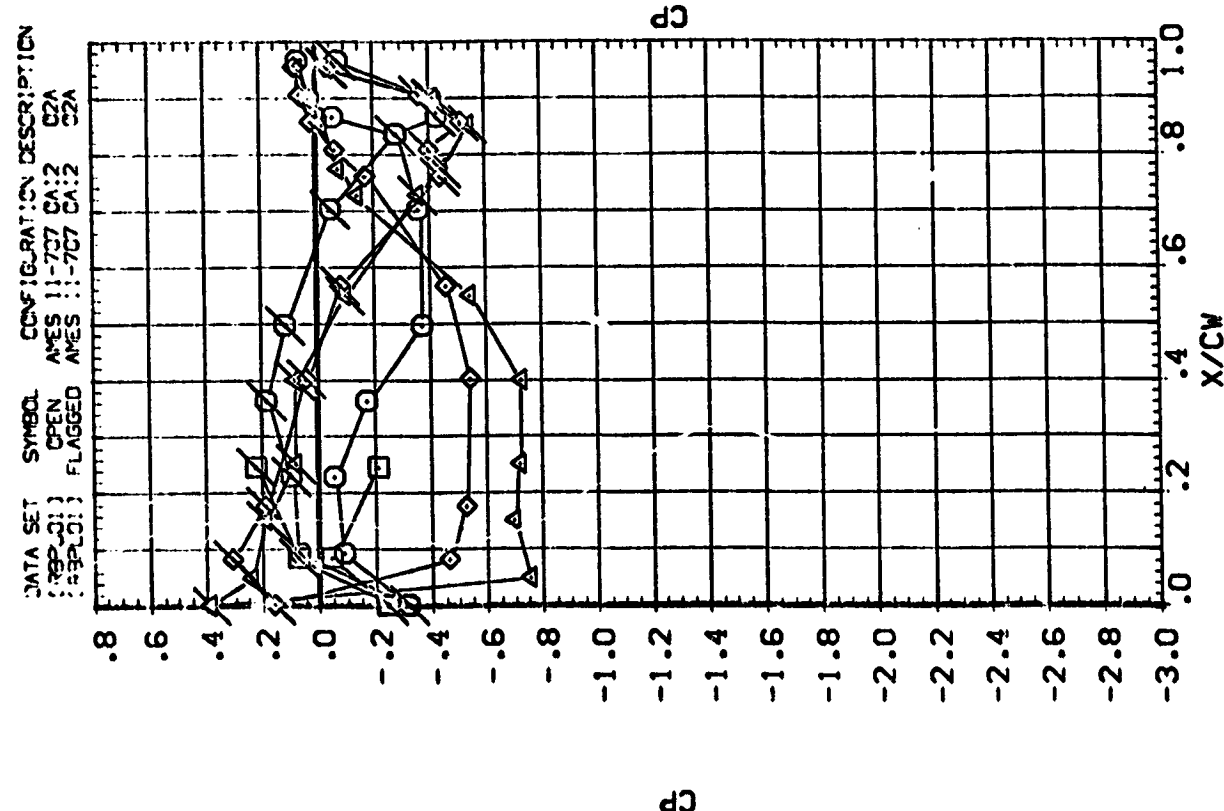
PARAMETRIC VALUES
 .000 .000
 .000 .000
 .000 .000



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 BETA .000
 ELEVON .000
 RUDER .000
 RUDER .000

SYMBOL
 V/34
 ALPHA
 MACH
 .299 4.980 .905
 .354 9.990
 .427
 .534

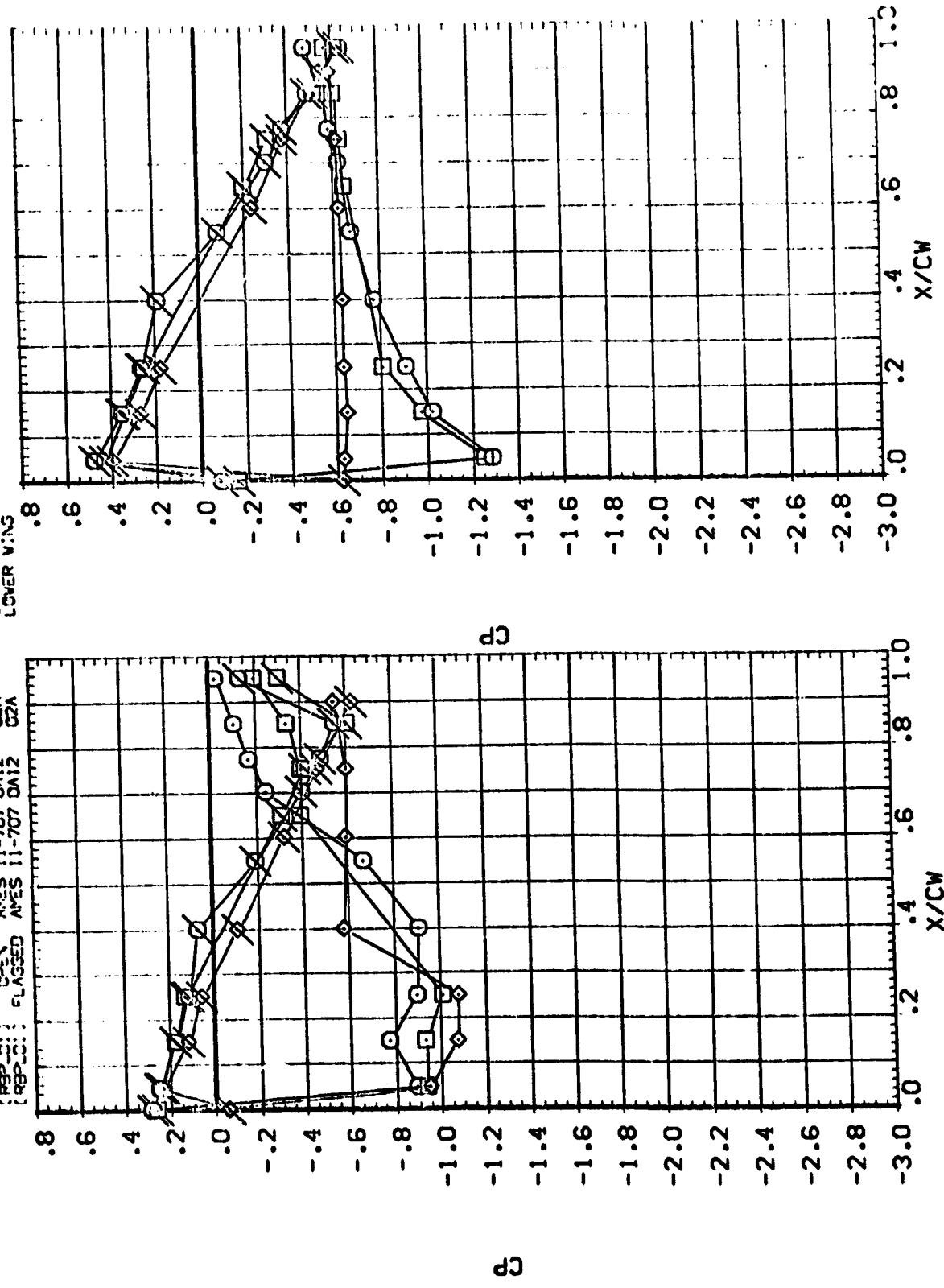


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 BETA .000
 ELEVON .000
 RUDDER .000
 RUDDER .000

SYMBOL Y/BV ALPHA MACH
 .573 4.990 .905
 .780 9.990
 .887

DATA SET SW902
 (RSP-01) OPEN
 (RSP-01) FLAGGED
 CONFIGURATION DESCRIPTION
 AYES 11-707 DA12 Q2A
 AYES 11-707 DA12 Q2A

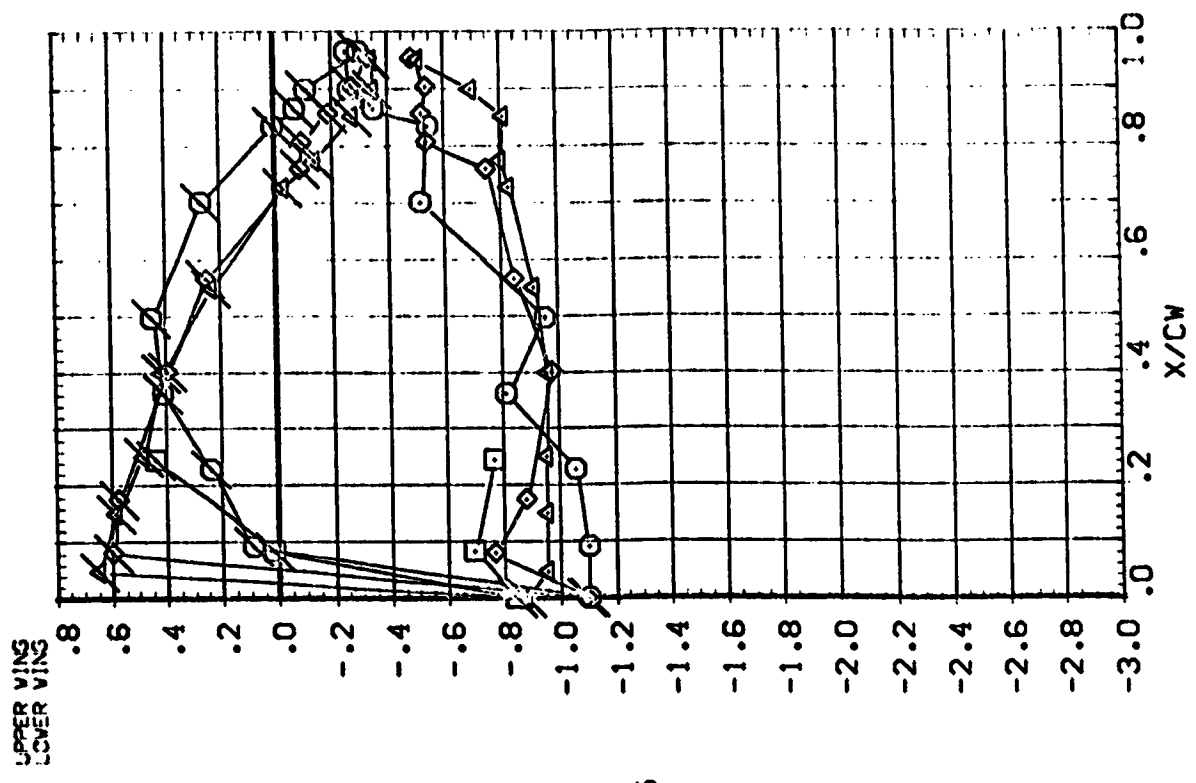
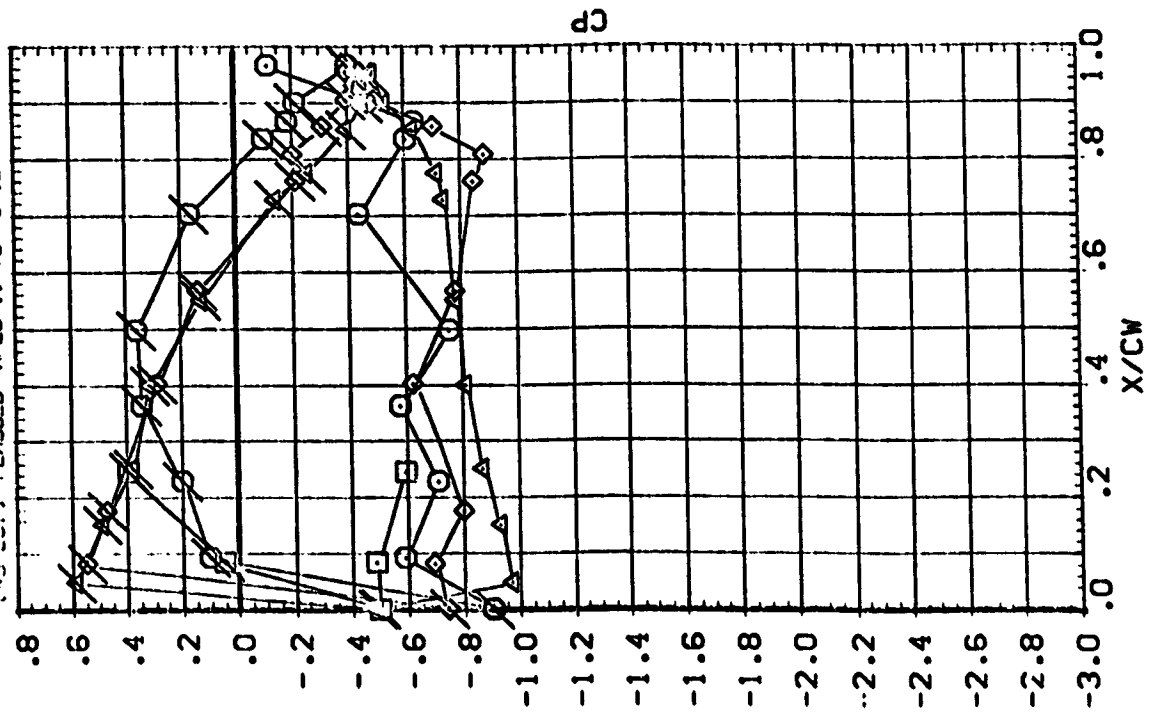


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES



Symbol Y/B_u ALPHA MACH
- .799 14.990 .905
- .364 20.020
- .427
- .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION
(RBP-1) OPEN AMES 11-707 OA12 C2A
(RBP-2) FLAGGED AMES 11-707 OA12 C2A



PARAMETRIC VALUES
BETA .000
ELEVON .000
RUDER .000

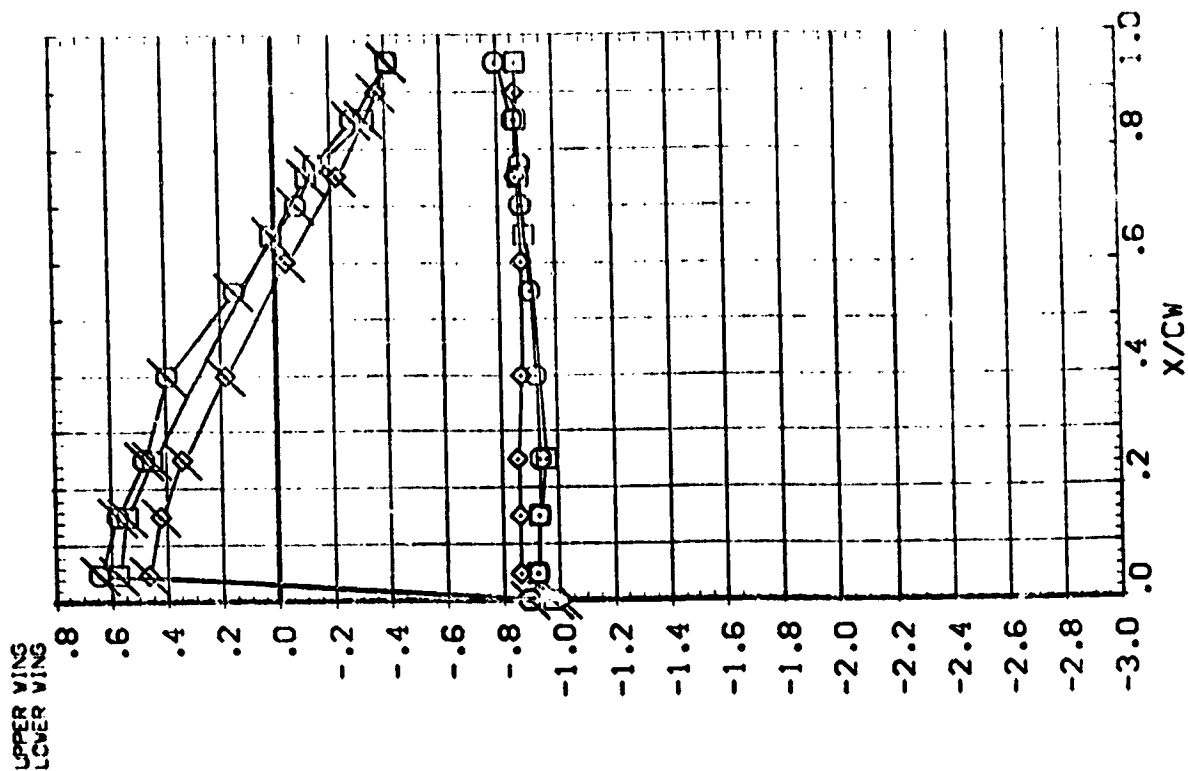
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES

BETA
ELEVON

SYMBOL V/BW ALPHA MACH
.573 14.980 .905
.78C 20.020
.887

DATA SET SYMBOL CONFIGURATION DESCRIPTION
(RSP-01) OPEN ARES 11-707 CA12 C2A
(RSP-01) FLAGGED ARES 11-707 CA12 C2A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

00
00
00

22
23



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

200

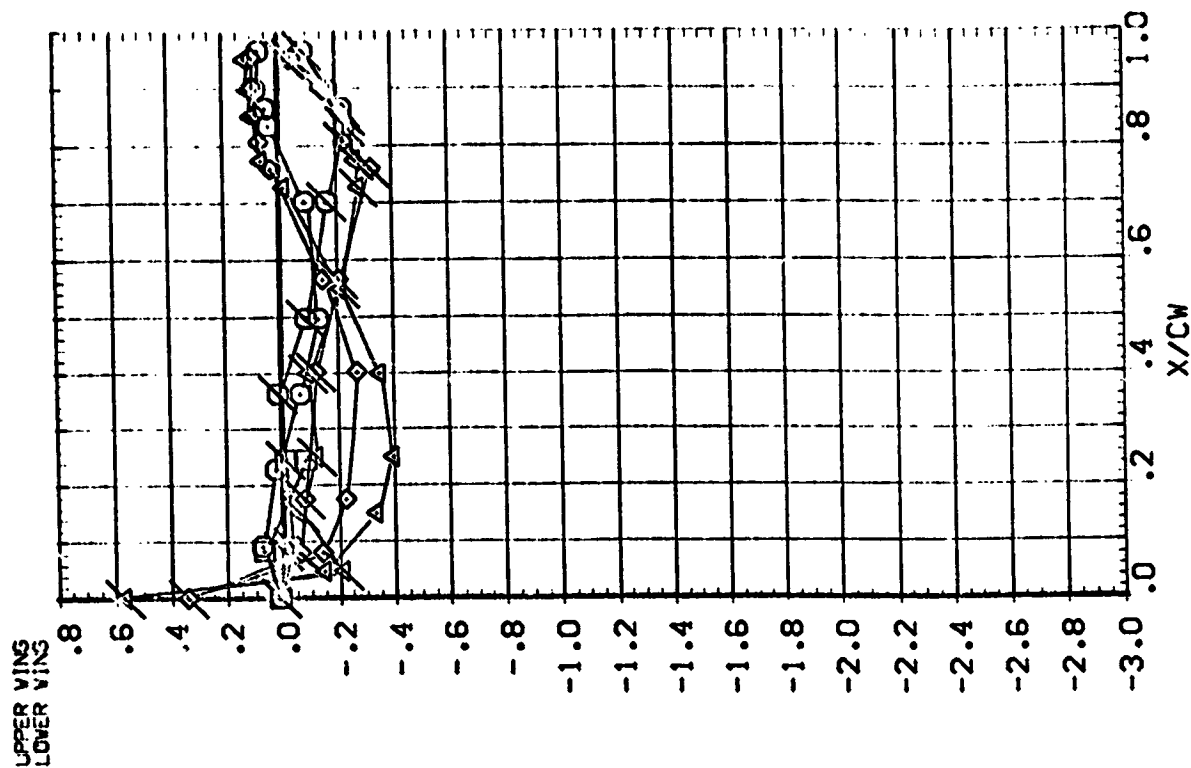
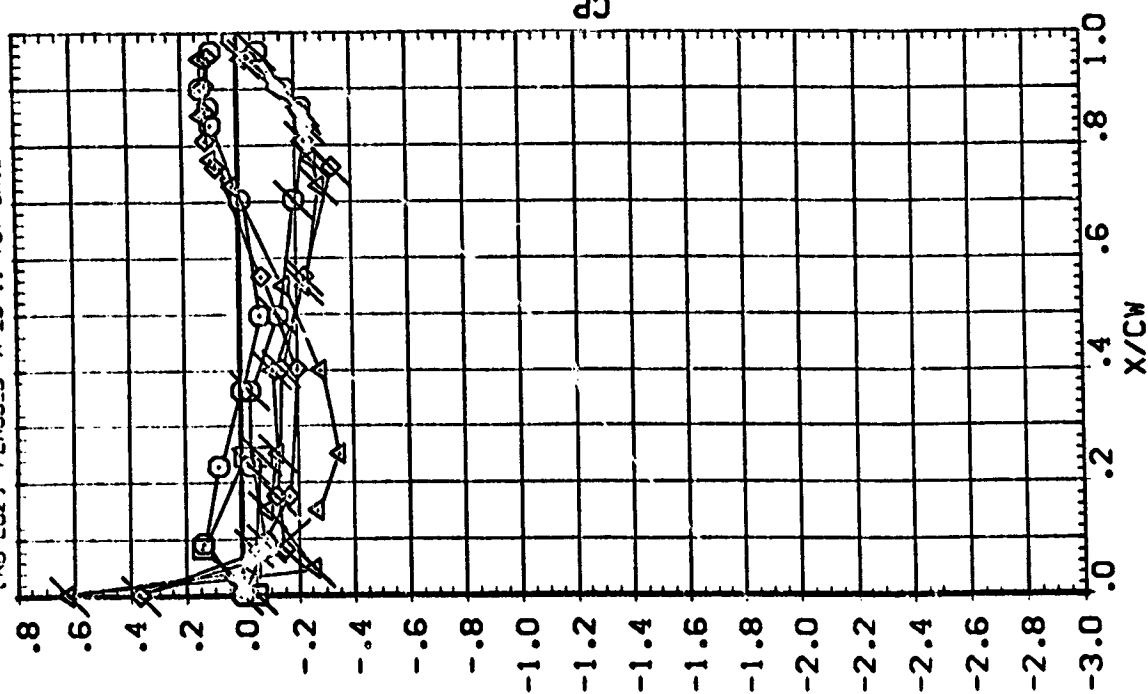
SYMBOLS: \diamond \square \triangle

WING: .299
 WING: .364
 WING: .427
 WING: .534

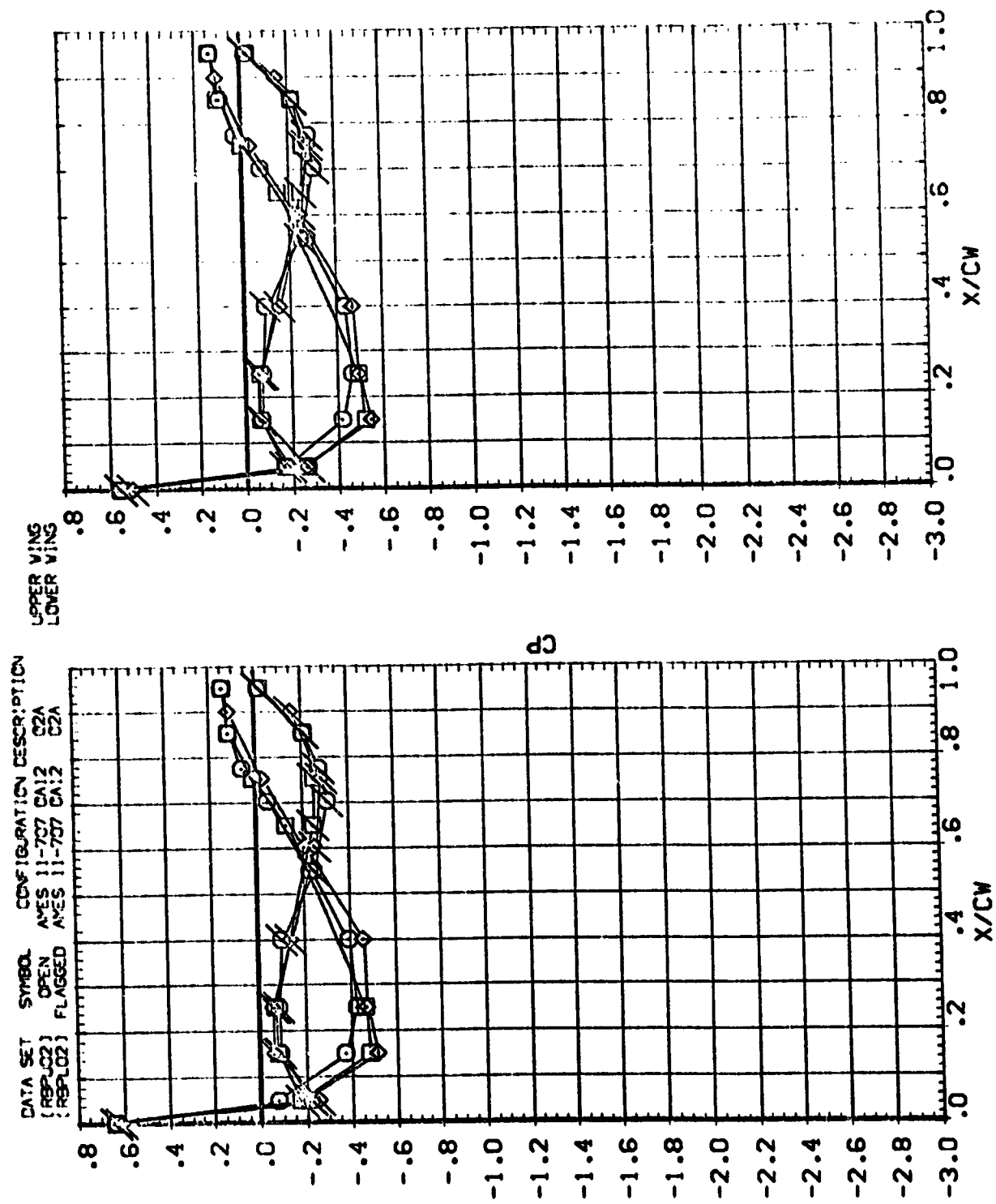
WING: -10.010
 WING: -4.960

WING: .598

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RBPLO2) OPEN AVES 11-707 DA12 QZA
 (RBPLO2) FLAGGED AVES 11-707 DA12 QZA

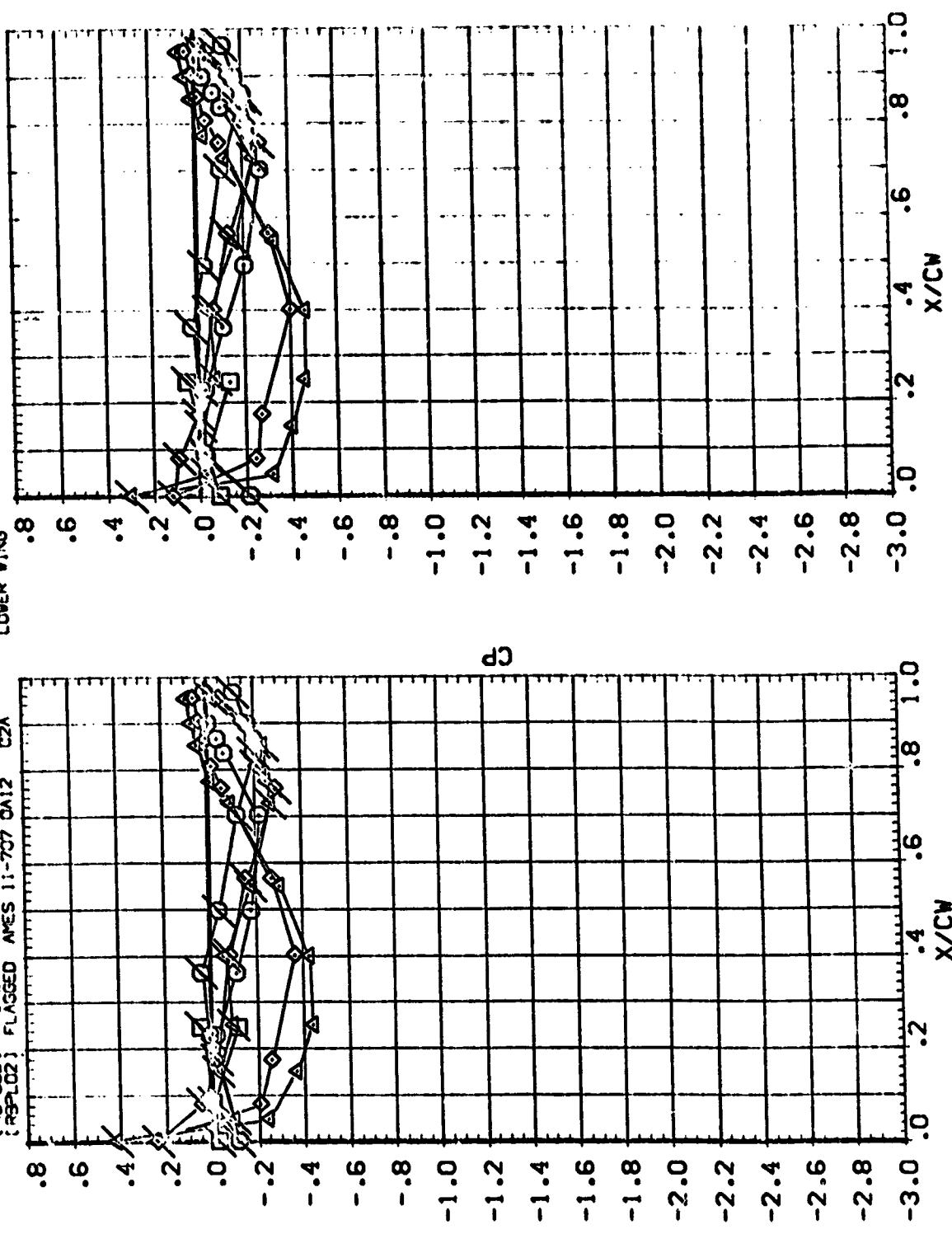


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [RSPLO2] OPEN AMES 11-707 OA12 C2A
 [RSPLO2] FLAGGED AMES 11-707 OA12 C2A

UPPER WING
 LOWER WING



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

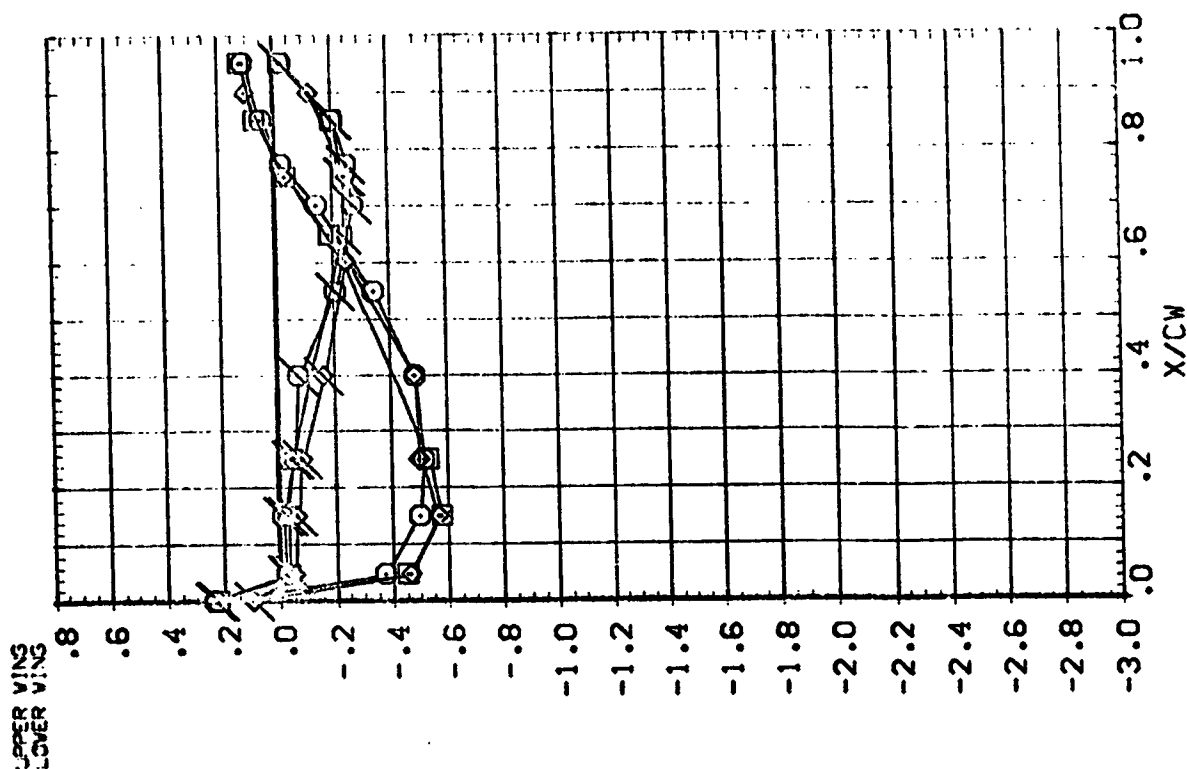
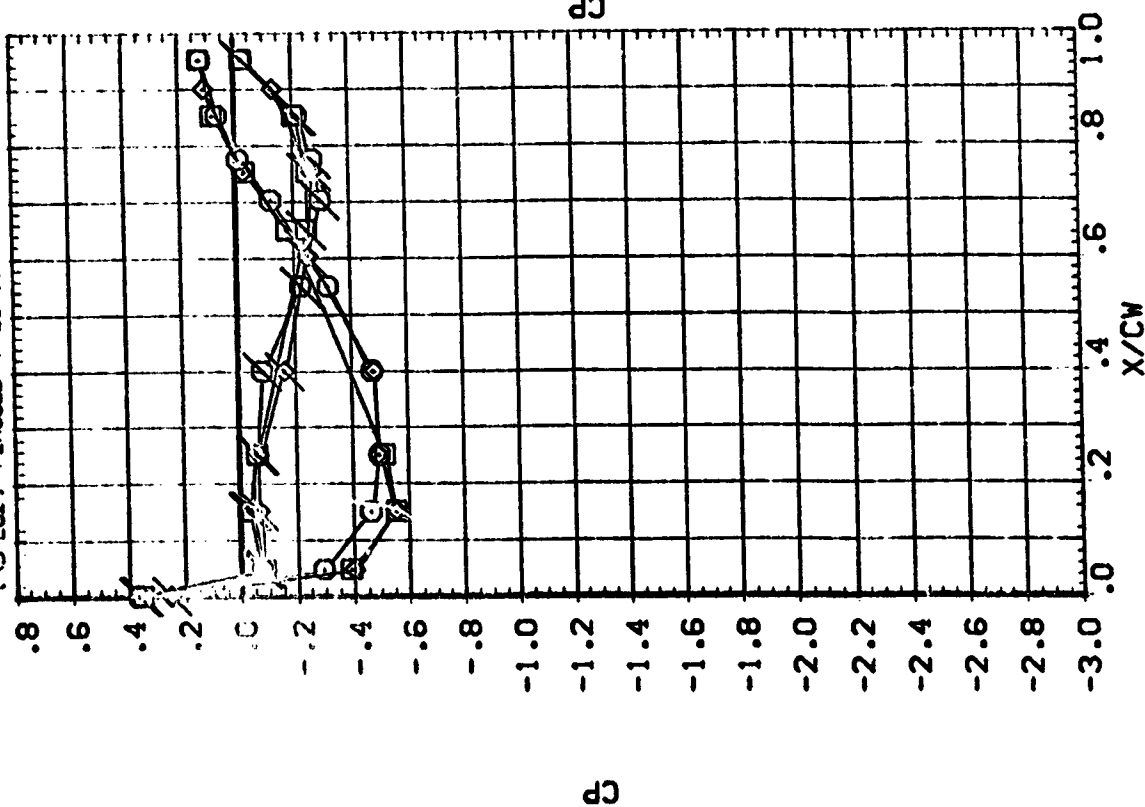
SYMBOL Y/BV .673
 .78C
 .687

BETA 5.230
 10.370

MACH .598

PARAMETRIC VALUES
 ALPHA .000
 ELEVON .000
 .000
 .000
 .000
 .000

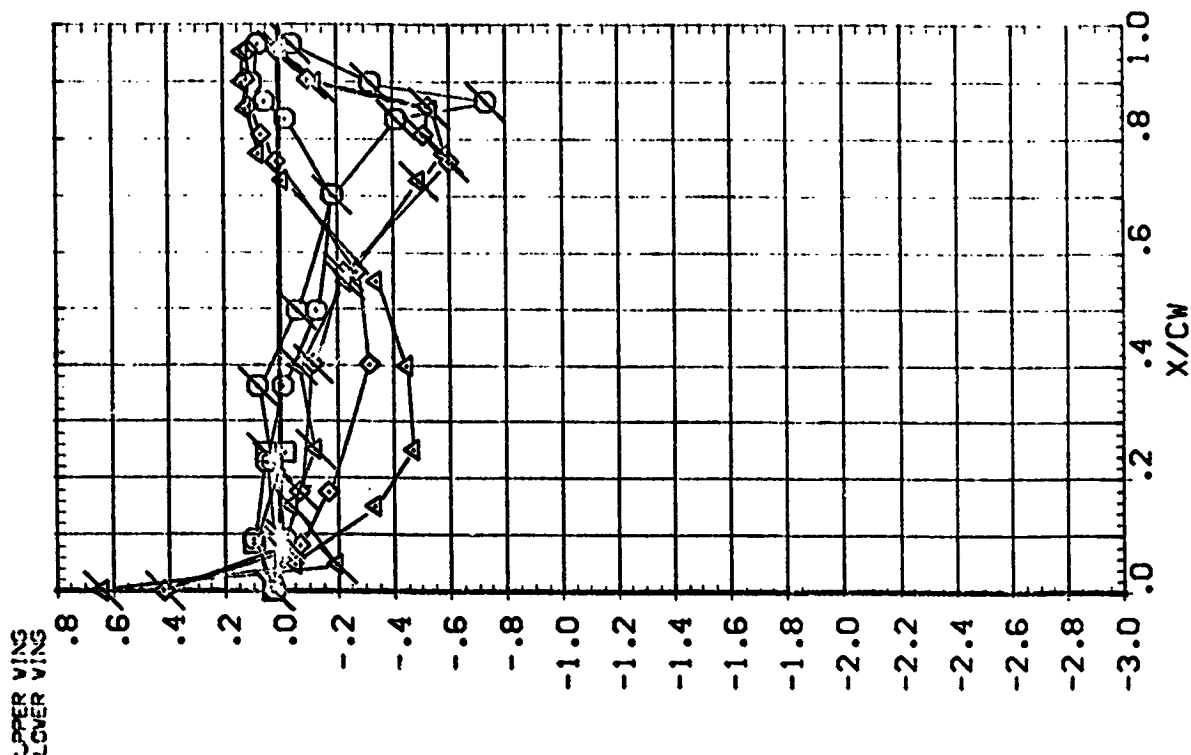
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 REP-02 OPEN AMES 11-707 DA12 C2A
 REP-02 FLAGGED AMES 11-707 DA12 C2A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

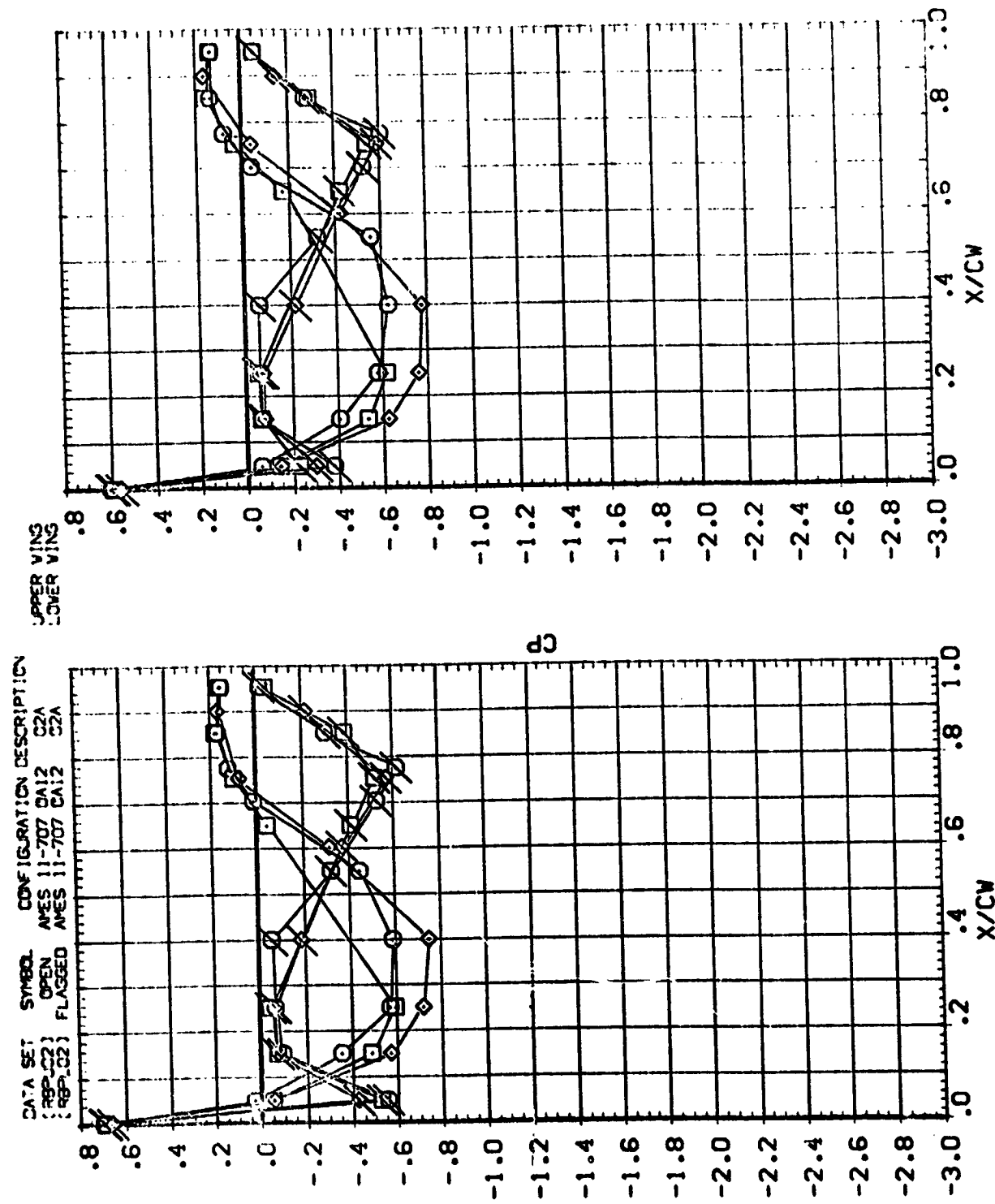
SYMBOL Y/B₀ SE₁A MACH
 .299 .000 .904
 .364 .000 .904
 .427 .000 .904
 .534 .000 .904

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 11-707 0A12 02A
 11-707 0A12 02A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

□ ◇



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES

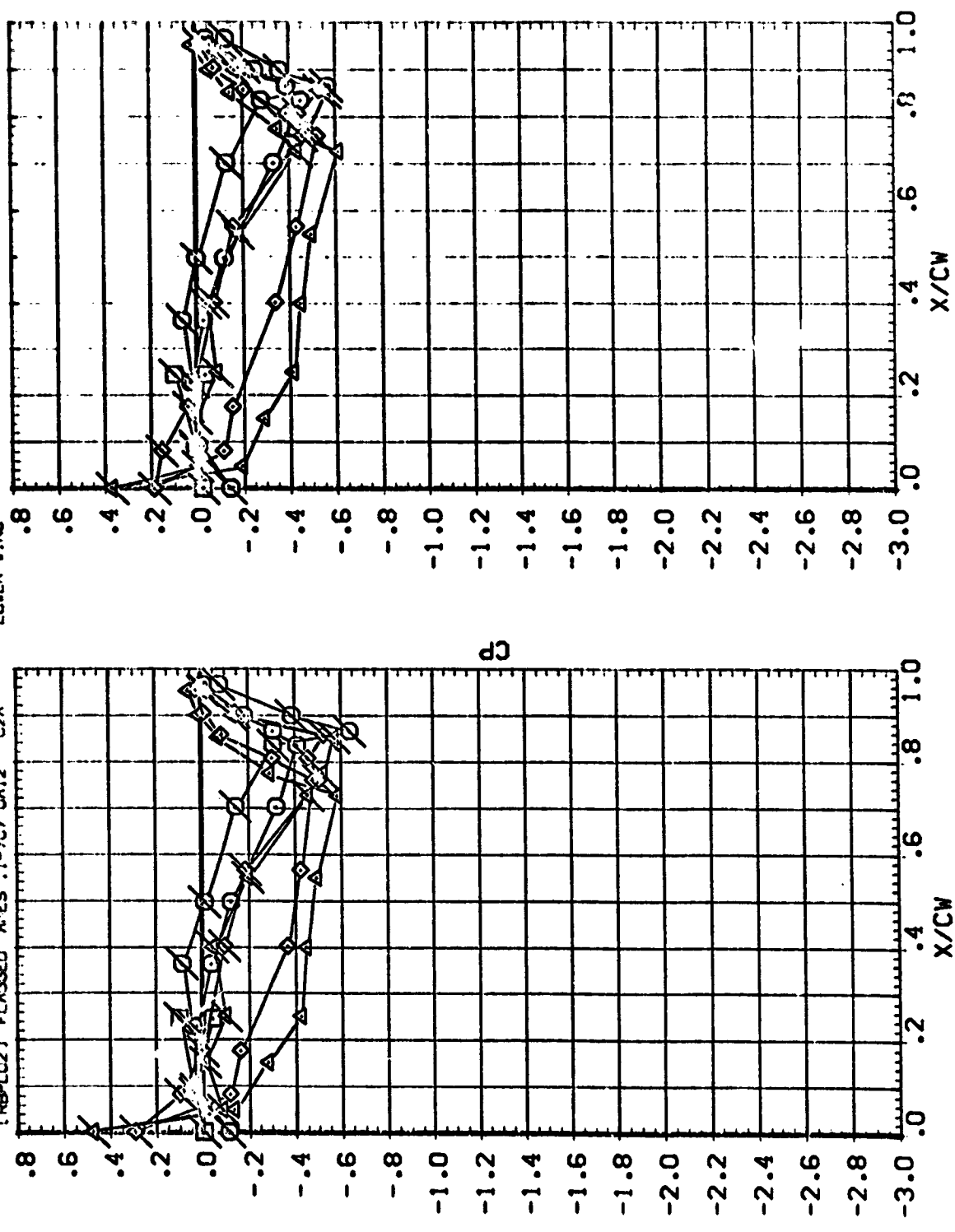
ALPHA
ELEVON

.000
.000
.000

SYMBOL Y/BV BETA MACH

.299 5.290 .904
.364 10.500
.427
.534

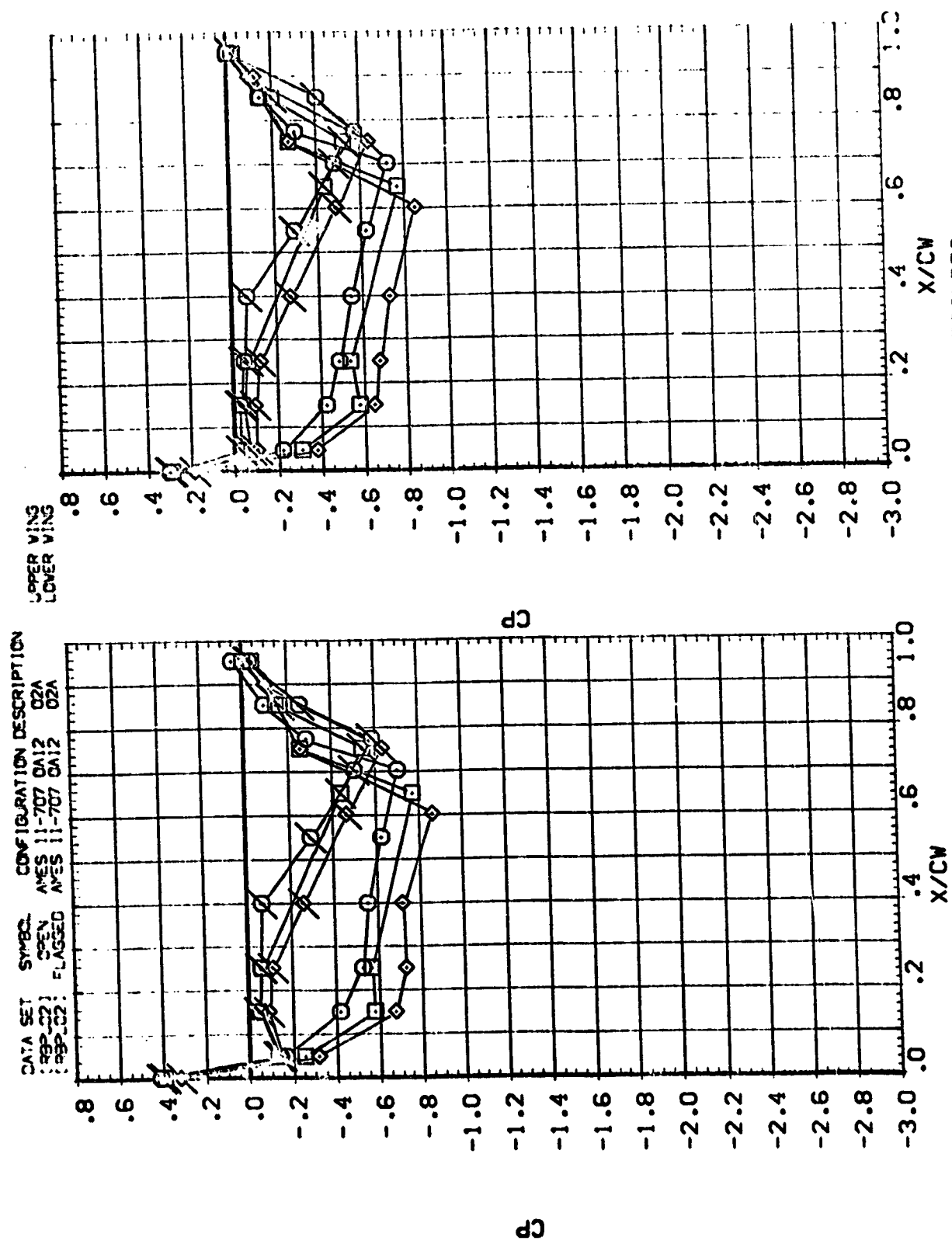
DATA SET SYMBOL CONFIGURATION DESCRIPTION
(RBPJ02) OPEN APES 11-707 CA12 C2A
(RBPJ02) FLAGGED APES 11-707 CA12 C2A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES	
.000	R000R
.000	R000R
.000	R000R

SYMBOL	Y/BV	BETA	MACH
○	.673	5.293	.904
□	.78C	10.530	
◇	.887		





SYMBOL
O
□
◇
△

Y/BN
.299
.364
.427
.534

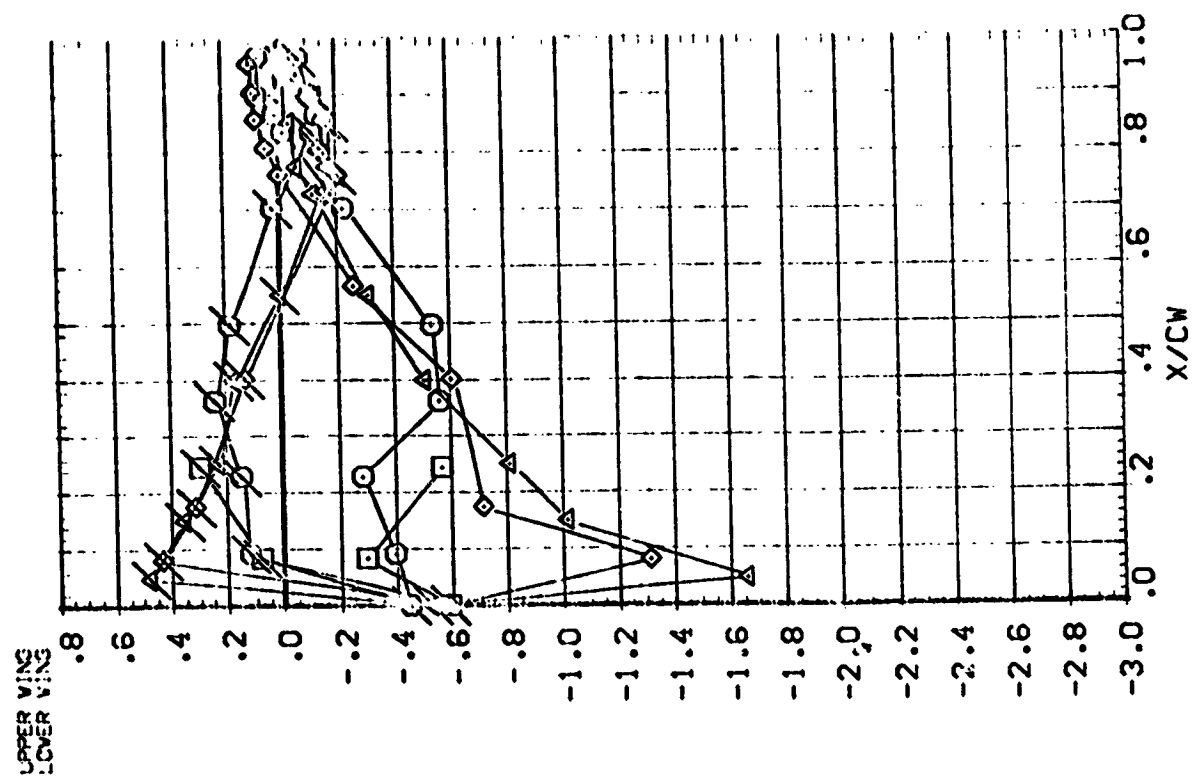
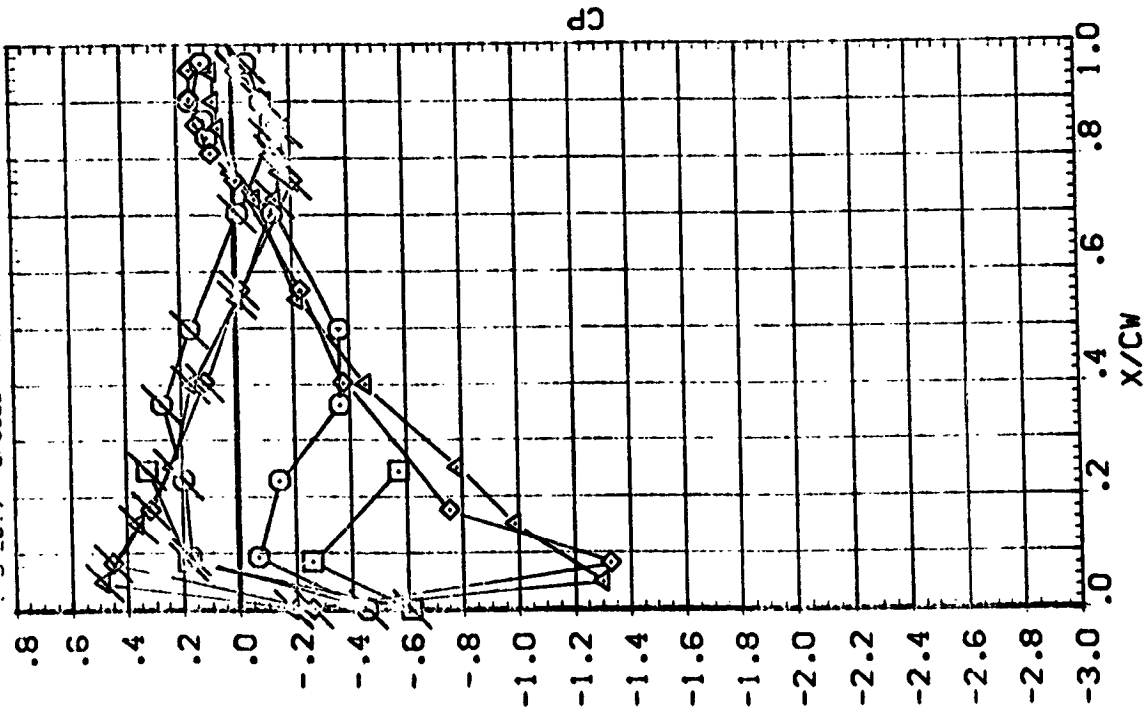
BETA
-10.110
-5.020

MACH
.598

ALPHA
ELEVON

PARAMETRIC VALUES
10.000
.000

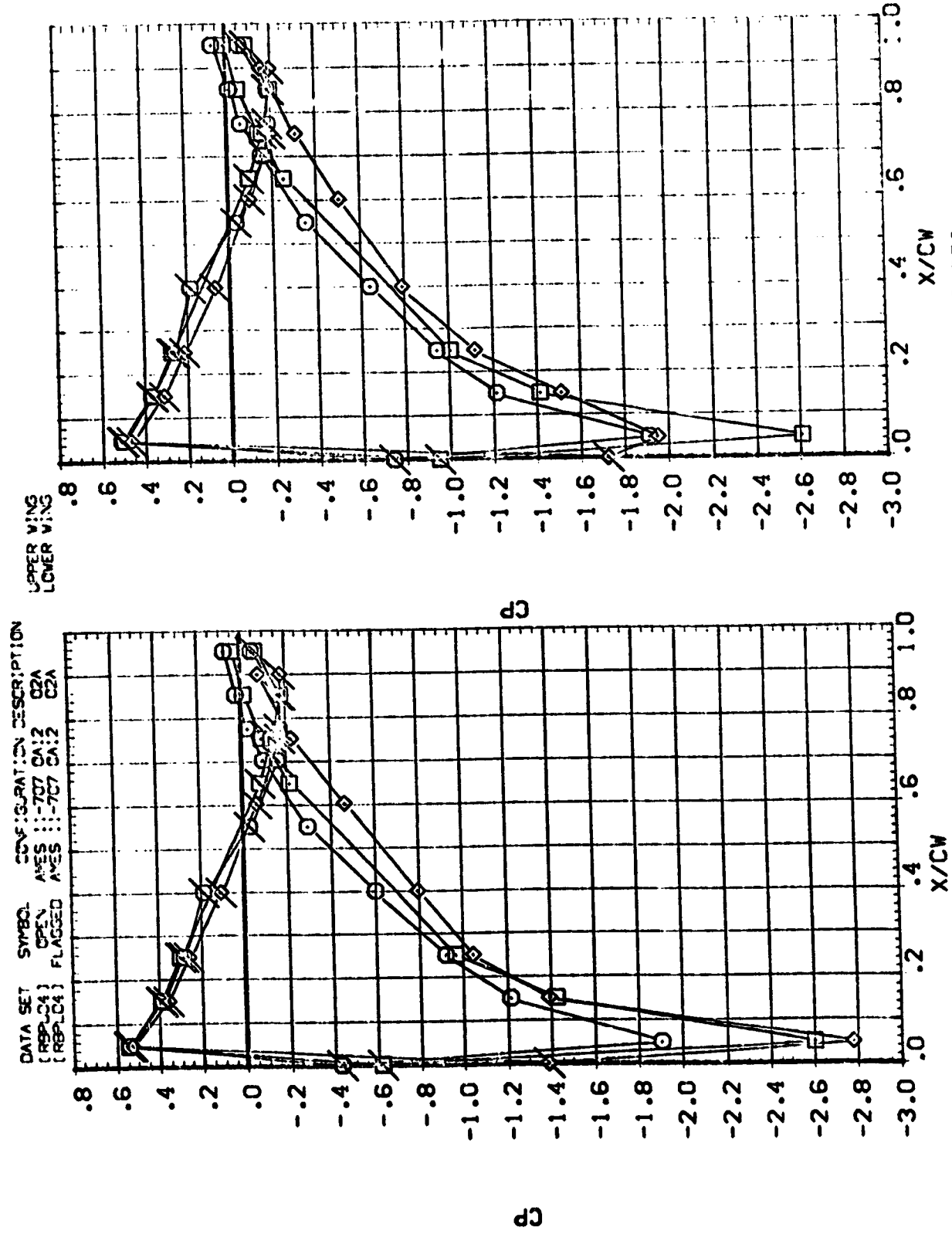
DATA SET SYMBOL CONFIGURATION DESCRIPTION
(332-24) OPEN AVES 11-707 OA12 OZA
(332-24) FLAGGED AVES 11-707 OA12 OZA



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA 10.000 RUDDER .000
 ELEVON .000 RUFLR .000

SYMBOL Y/BV BETA MACH
 .673 -10.110 .598
 .780 -5.020
 .887





SYMBOL
□ □ ◇ △

V/34
.289
.364
.427
.534

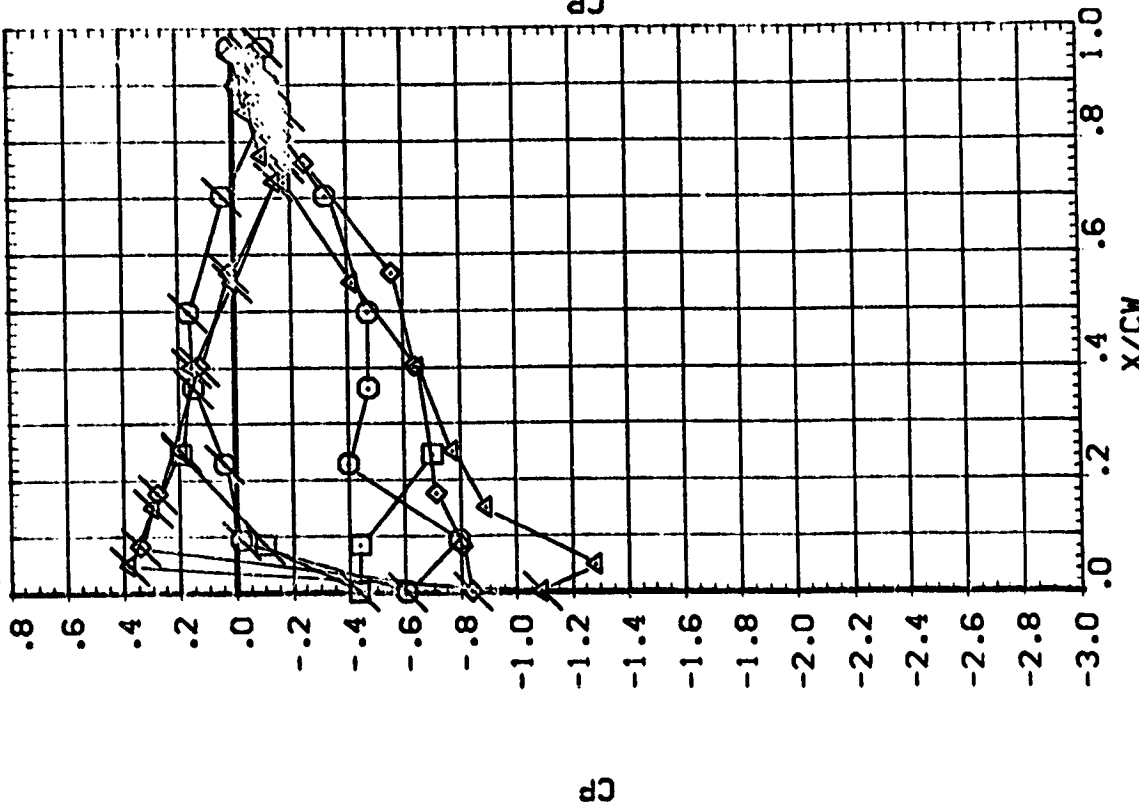
BETA
5.170
10.270

MACH
.598

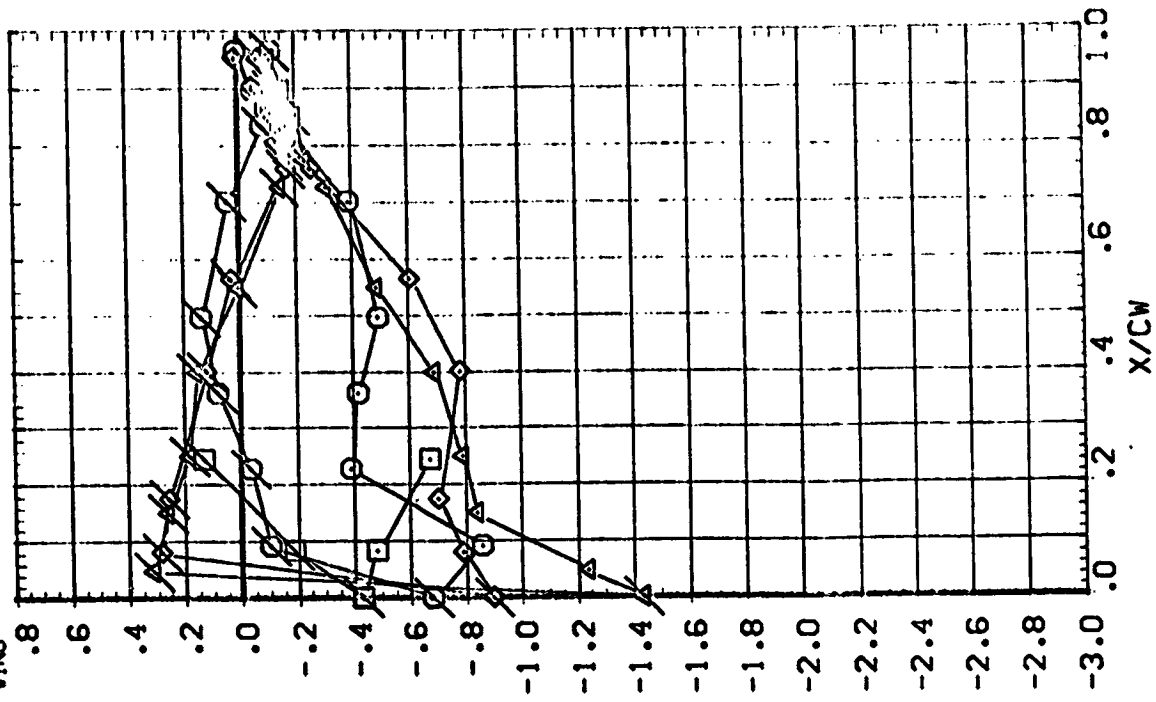
ALPHA
ELEVON

PARAMETRIC VALUES
10.000 RUDER
.000 RUDFLR

DATA SET SYMBOL CONFIGURATION DESCRIPTION
(REP.04) OPEN AMES 11-707 CA12 C2A
(REP.04) FLAGGED AMES 11-707 CA12 C2A

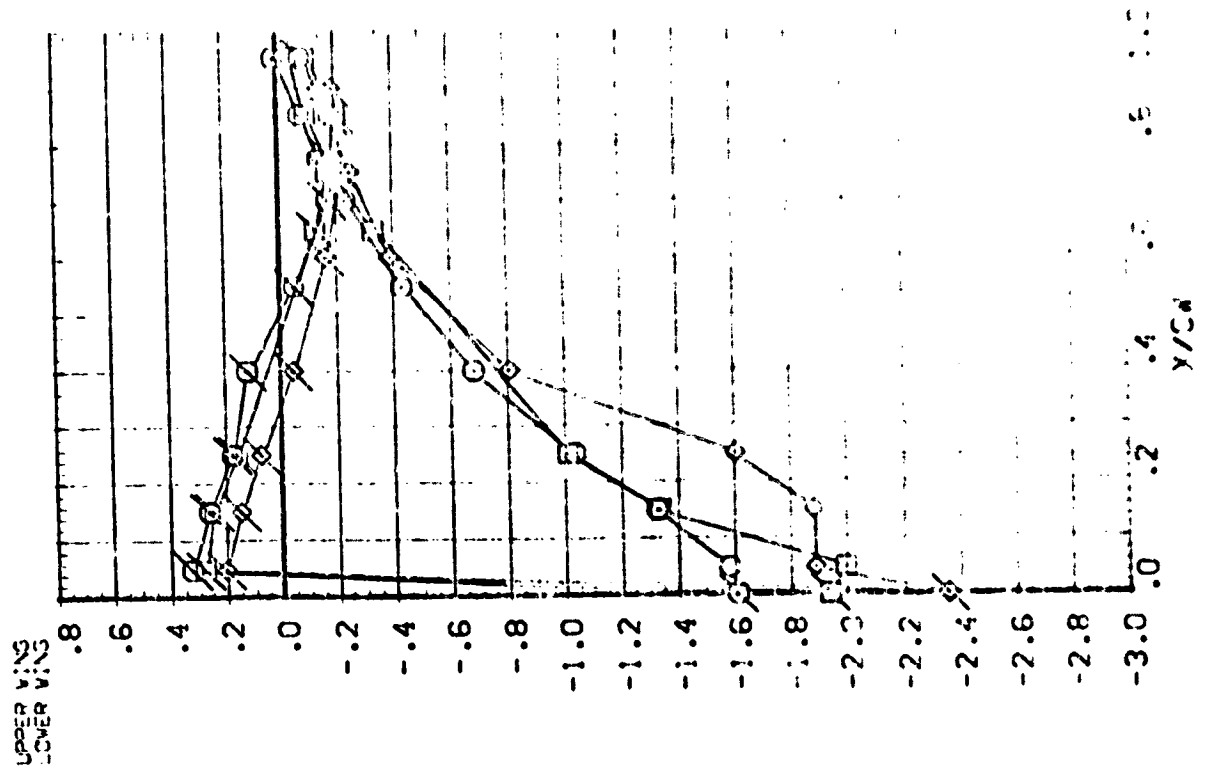
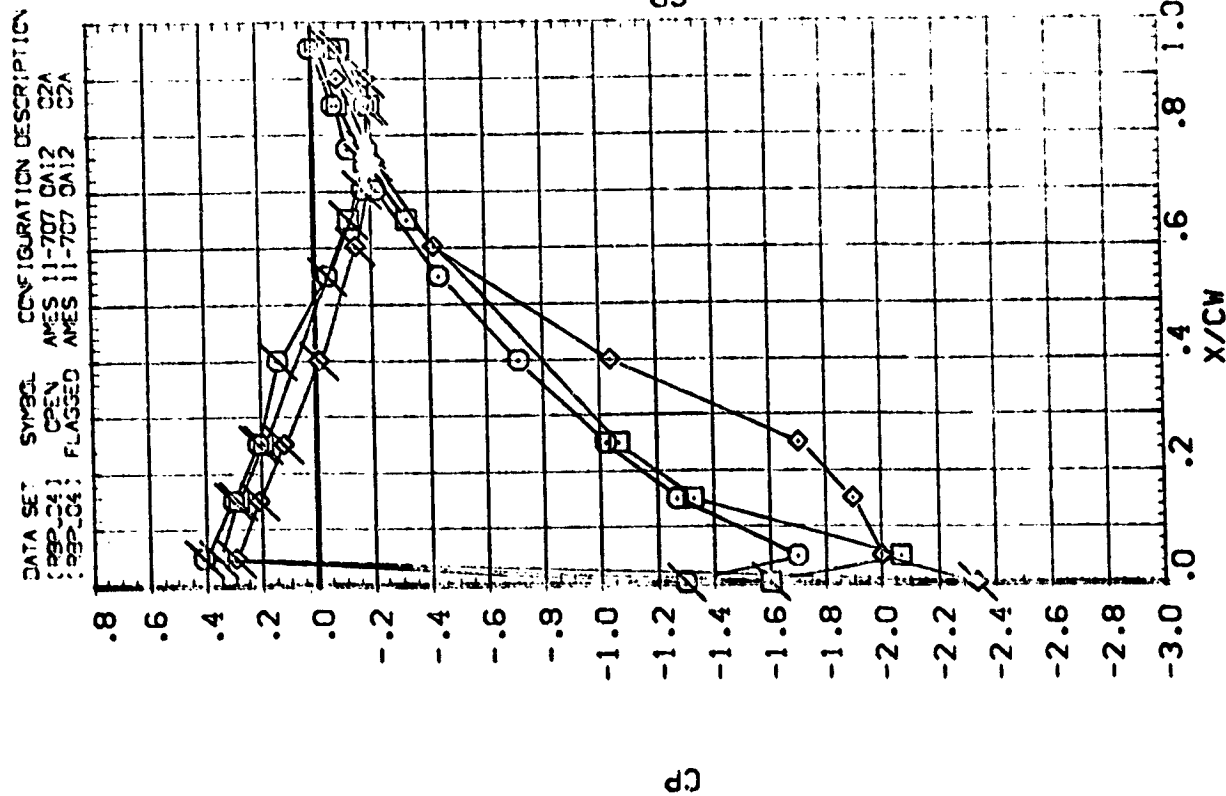


UPPER WING
LOWER WING



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

SYMBOL: 0010
 Y/BV: .673
 BETA: 5.170
 MACH: .598
 ALPHA: 10.000
 ELEVON: .000
 RUDDER: 10.000
 RUDDER: .000

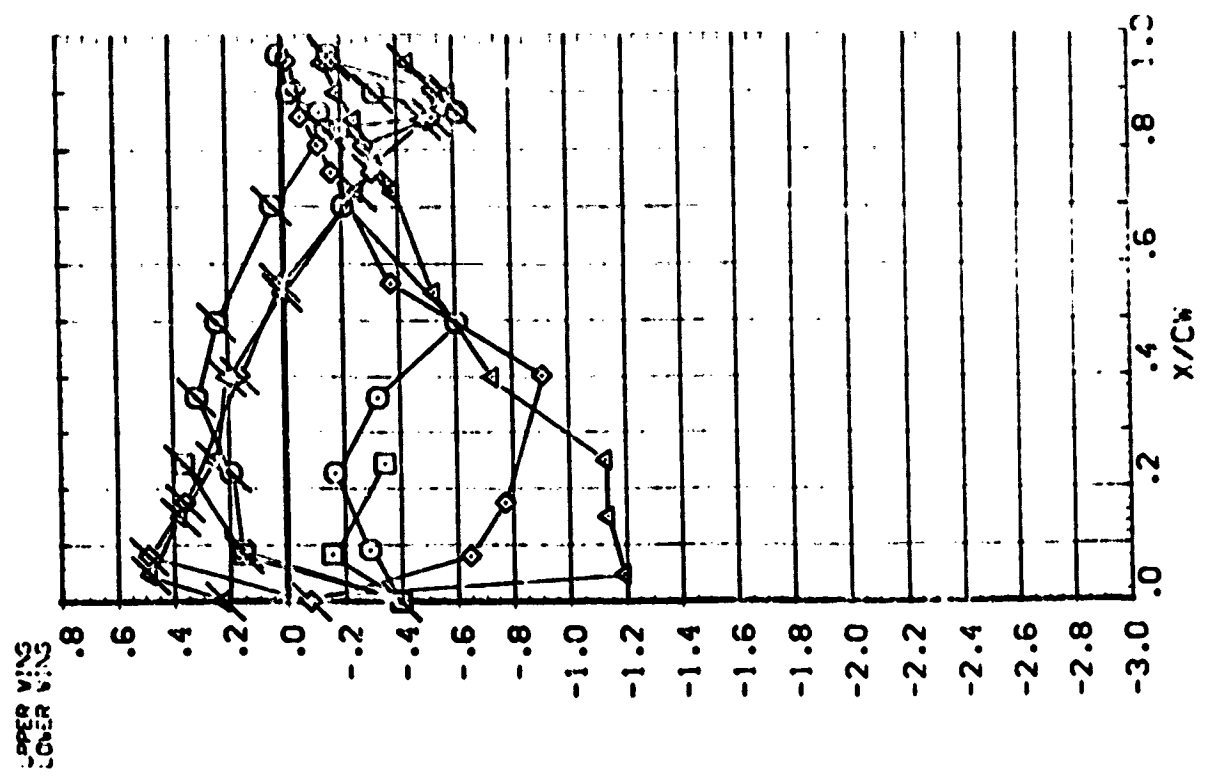
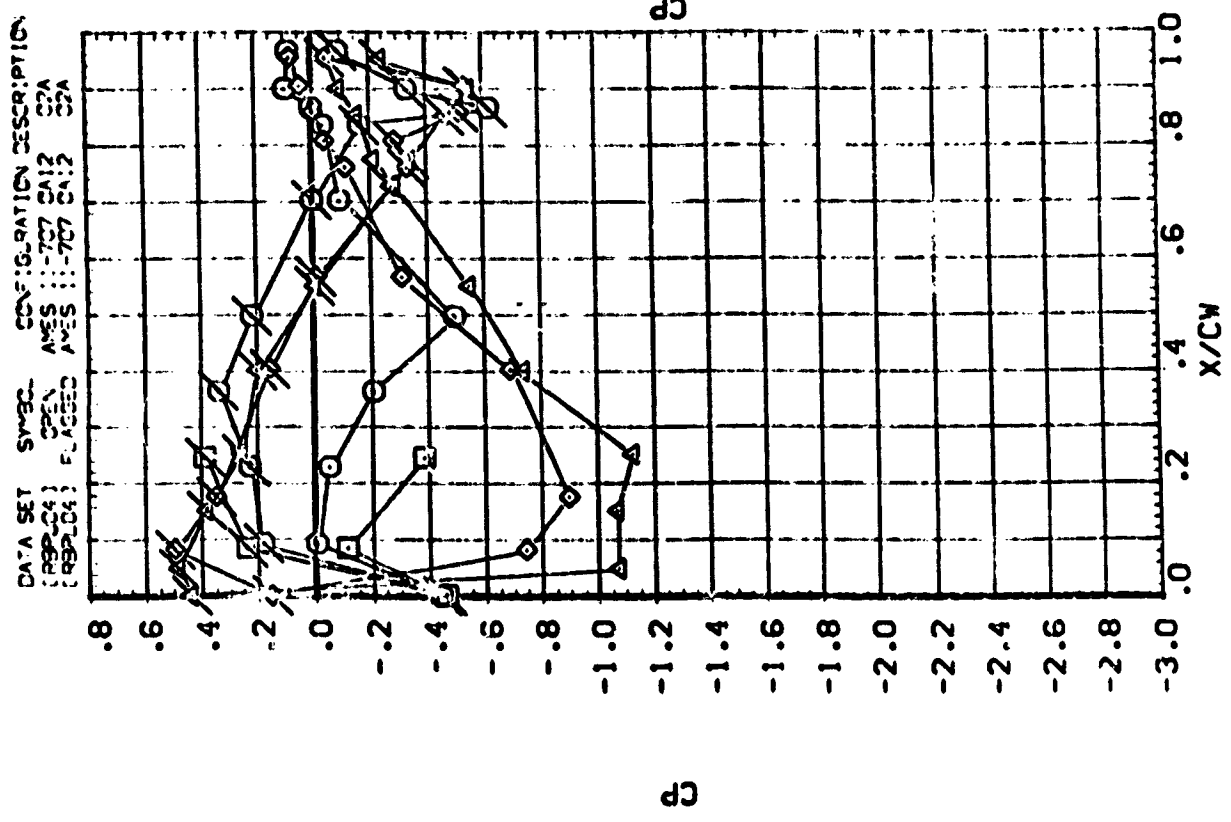


CLOCKWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES



SYMBOL Y/BV BETA WACH
○ .298 -10.230 .902
□ .364 -5.070
◇ .427
△ .534

PARAMETRIC VALUES
10.000 RUMBER
1000 RUMBER

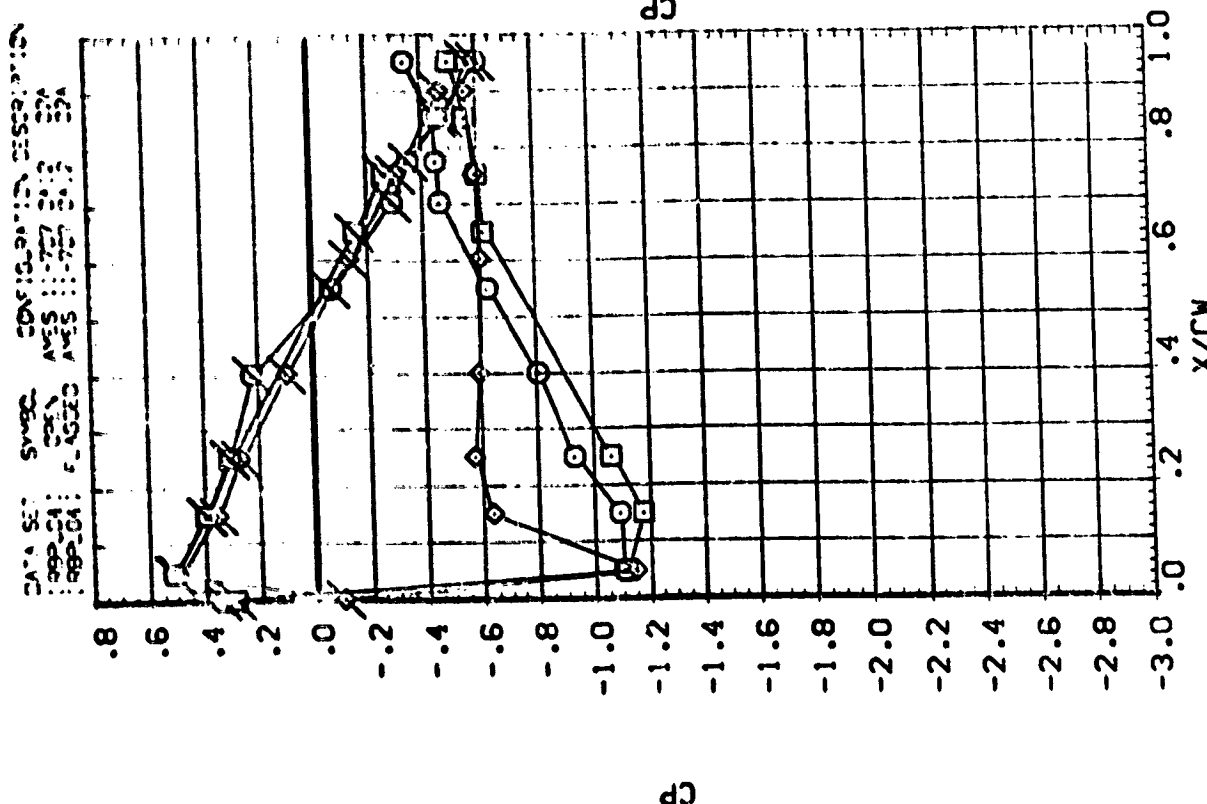
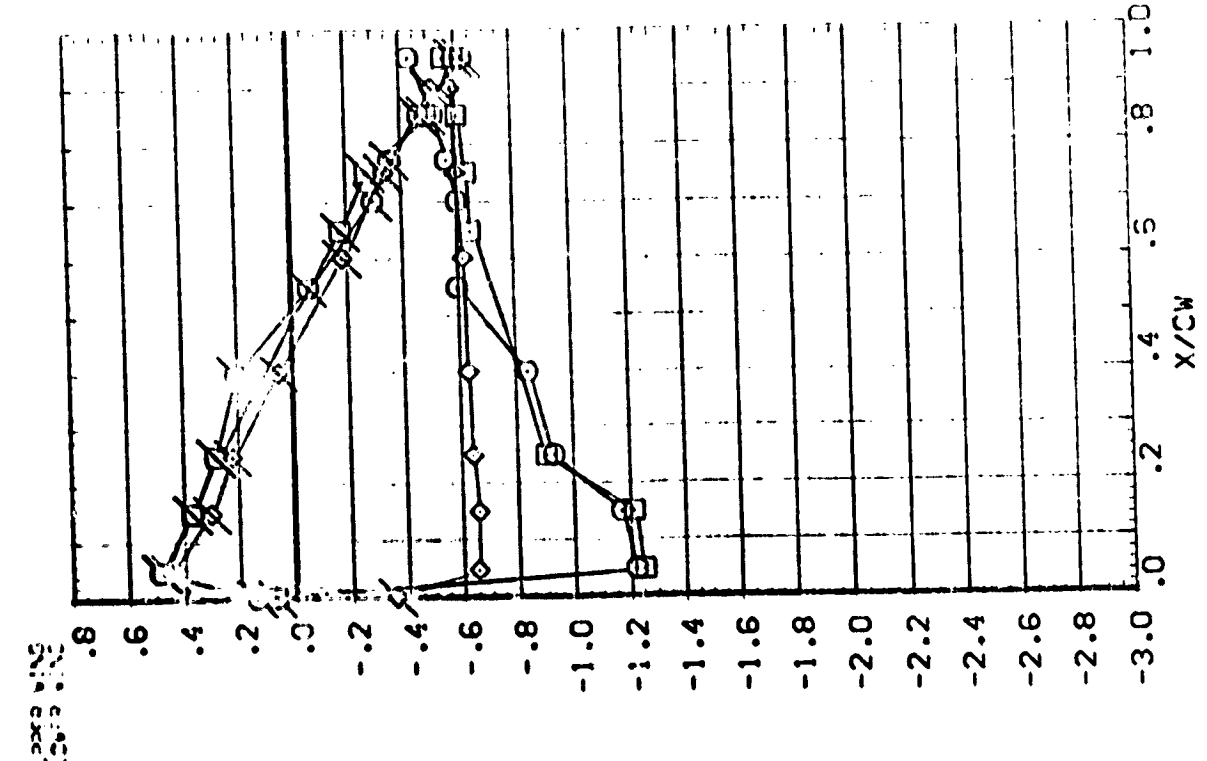


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

SYMC. V/3N BETA WAC-
 .673 -10.230 .907
 .78C -5.07C
 .887

ALPHA
 ELEVATION

GEOMETRIC VALUES
 10.000 2.000
 1.000 2.000

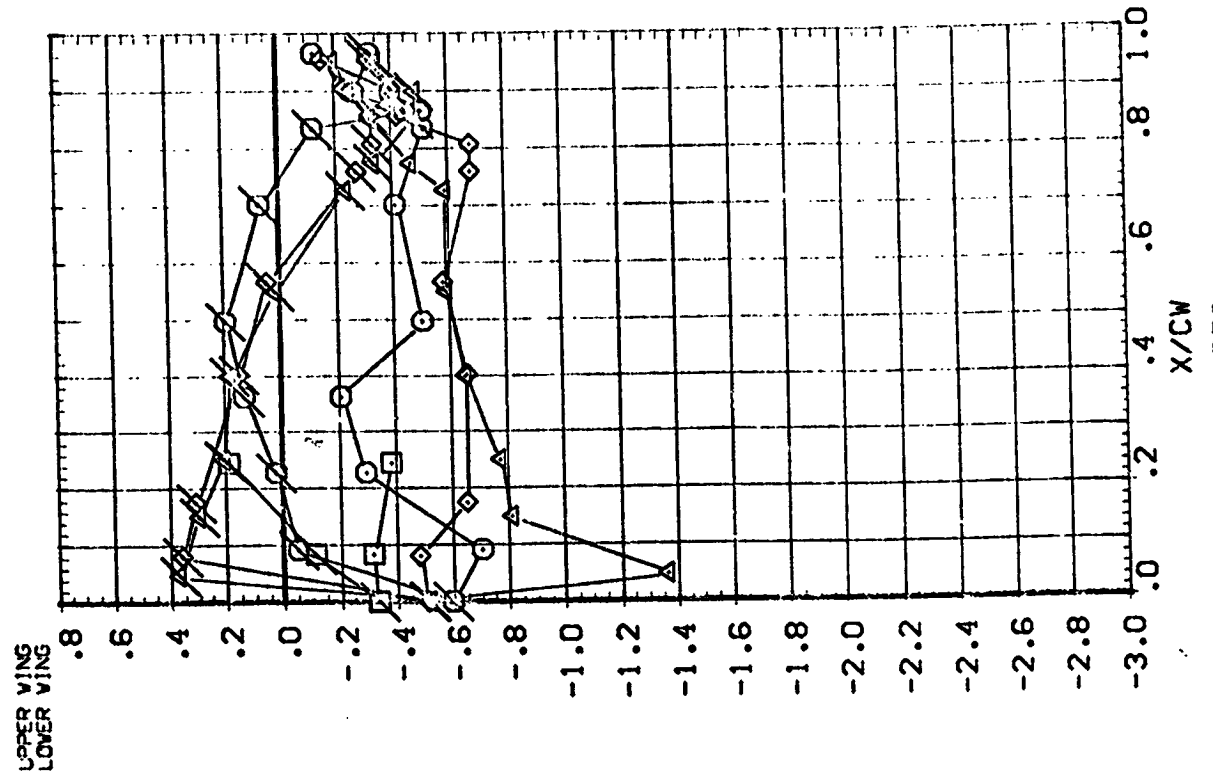
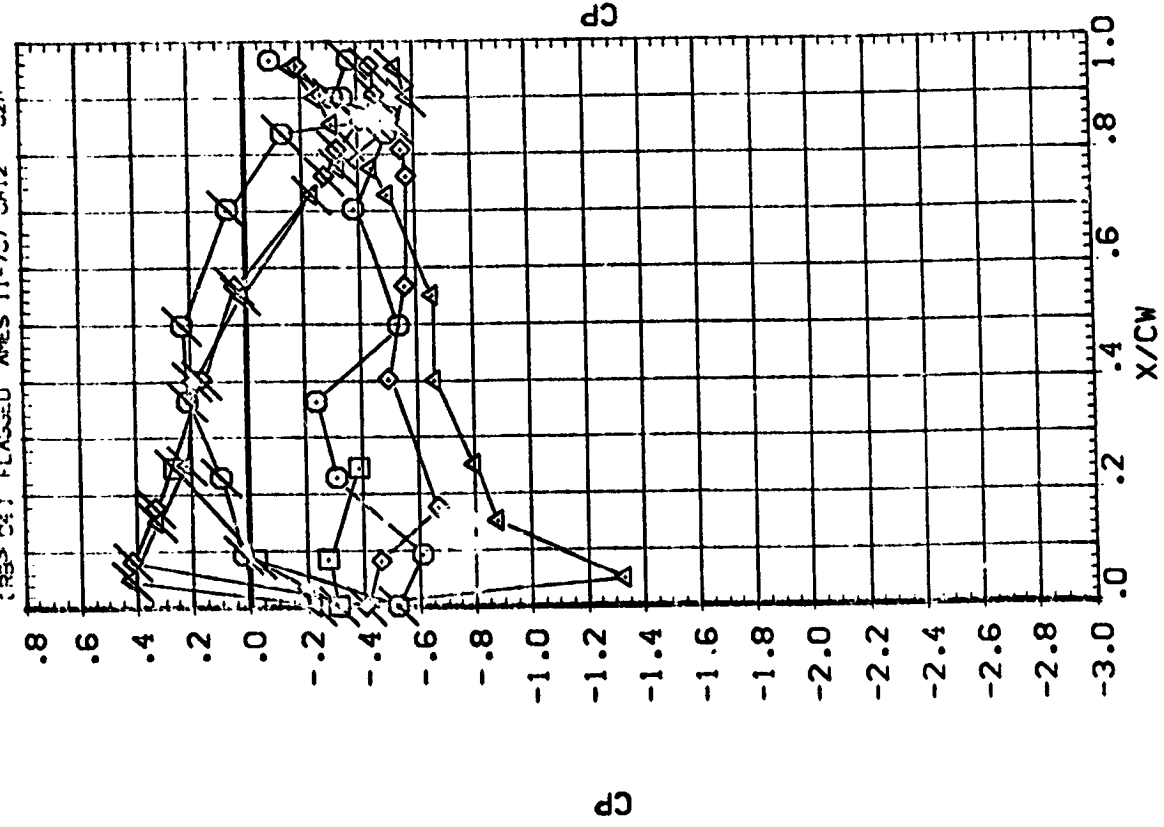


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

SV3C-
V/34
BETA
MACH
S.230
.902
S.364
S.427
S.534

PARAMETRIC VALUES
ALPHA
ELEVON
10.000
.000
RUDDER
RUDDER
10.000
.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
REP 04 OPEN AVES 11-707 CA12 C2A
REP 04 FLAGGED AVES 11-707 CA12 C2A



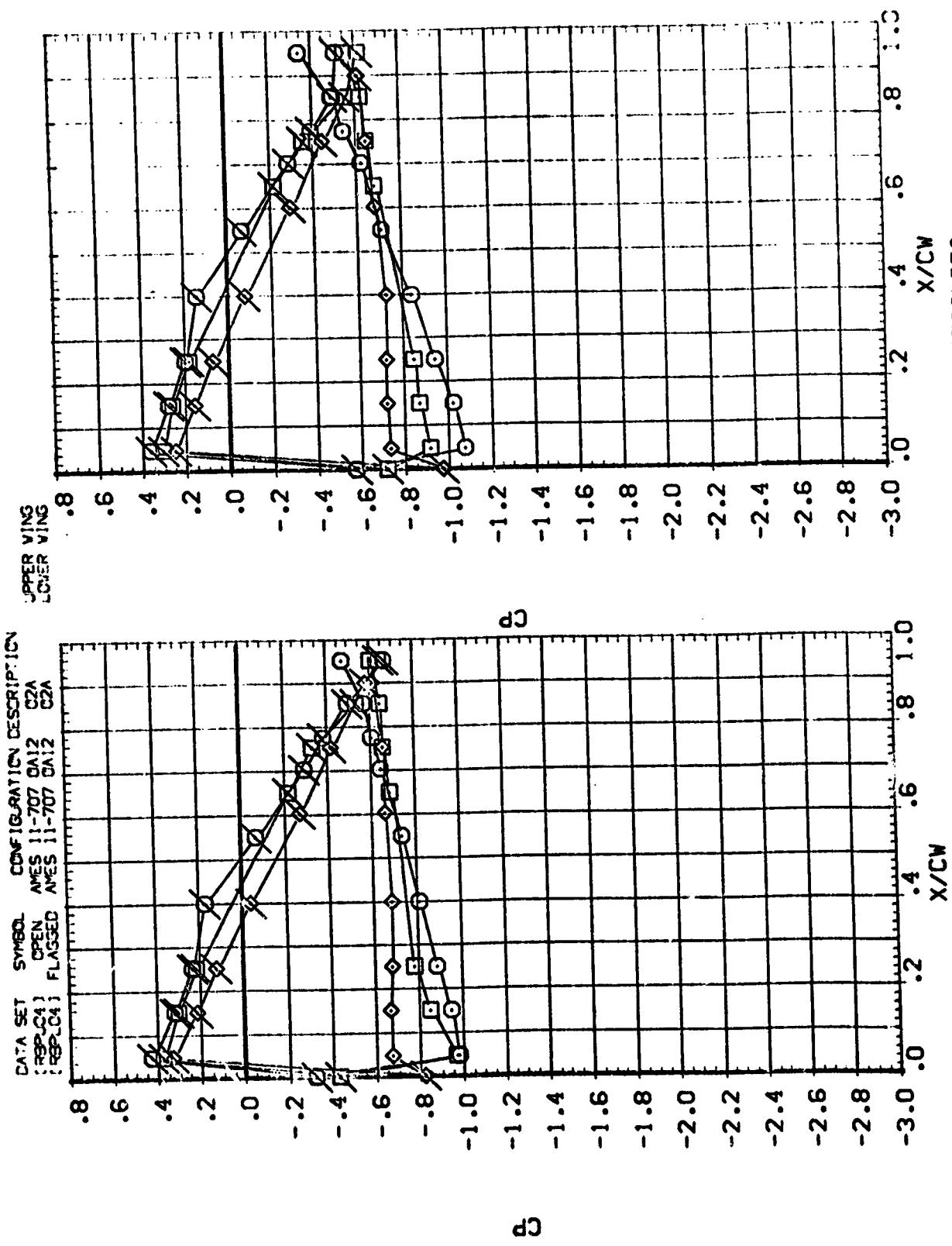
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

ALPHA
ELEVON
0.000
0.000
0.000
0.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
(RSP-04) OPEN AMES 11-707 0A12 C2A
(RSP-04) FLAGGED AMES 11-707 0A12 C2A

0.673
0.78C
0.887

CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES





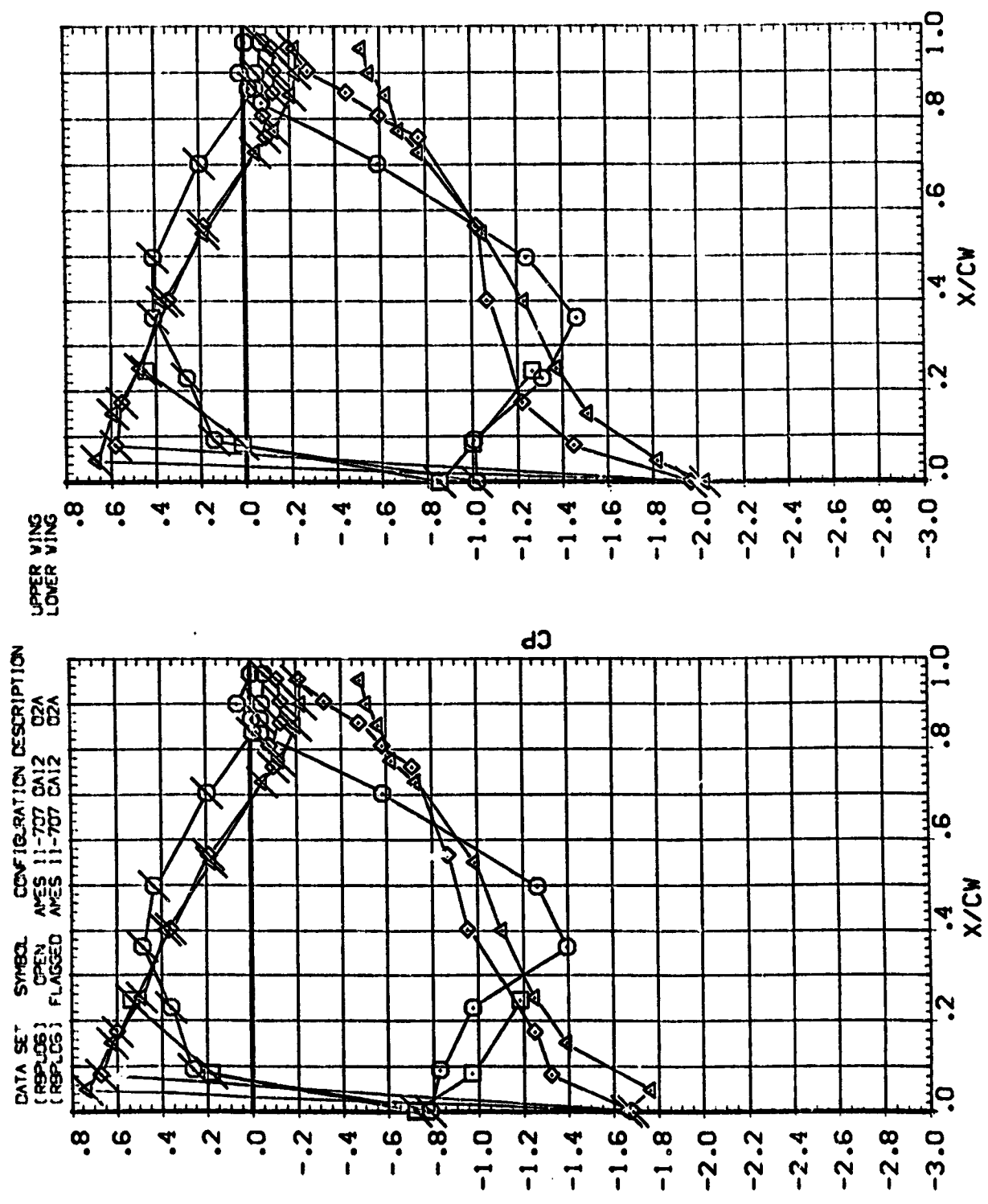
PARAMETRIC VALUES
ALPHA 20.000
ELEVON .000
RUDDER .000
RUDFLR .000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
(RSPLOS) OPEN ANES 11-707 CA12 D2A
(RSPLOS) FLAGED ANES 11-707 CA12 D2A

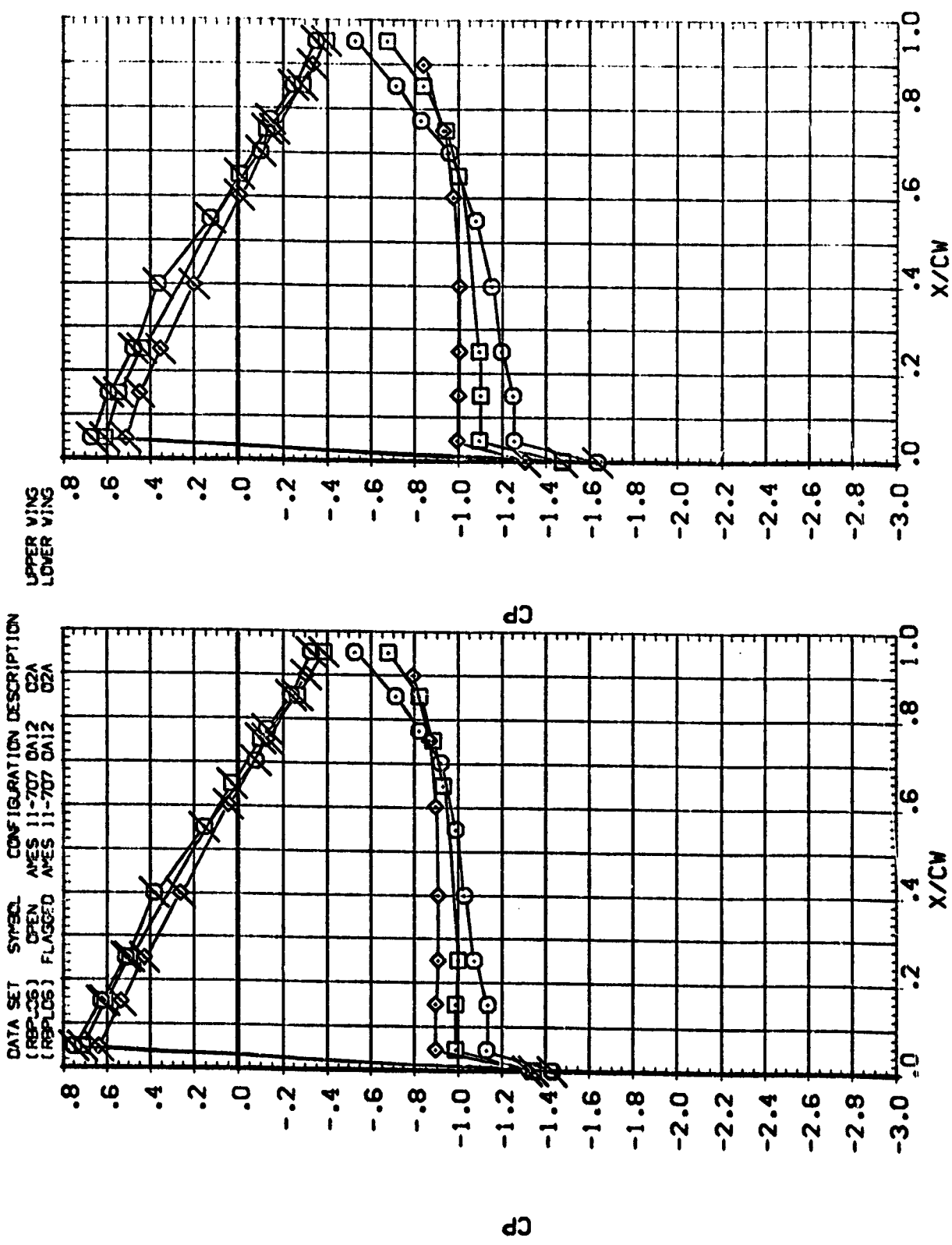
BETA MACH
-10.030 .996
-4.970

Y/BV
.259
.364
.427
.534

SYMBOL
○ □ ◇ △



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES





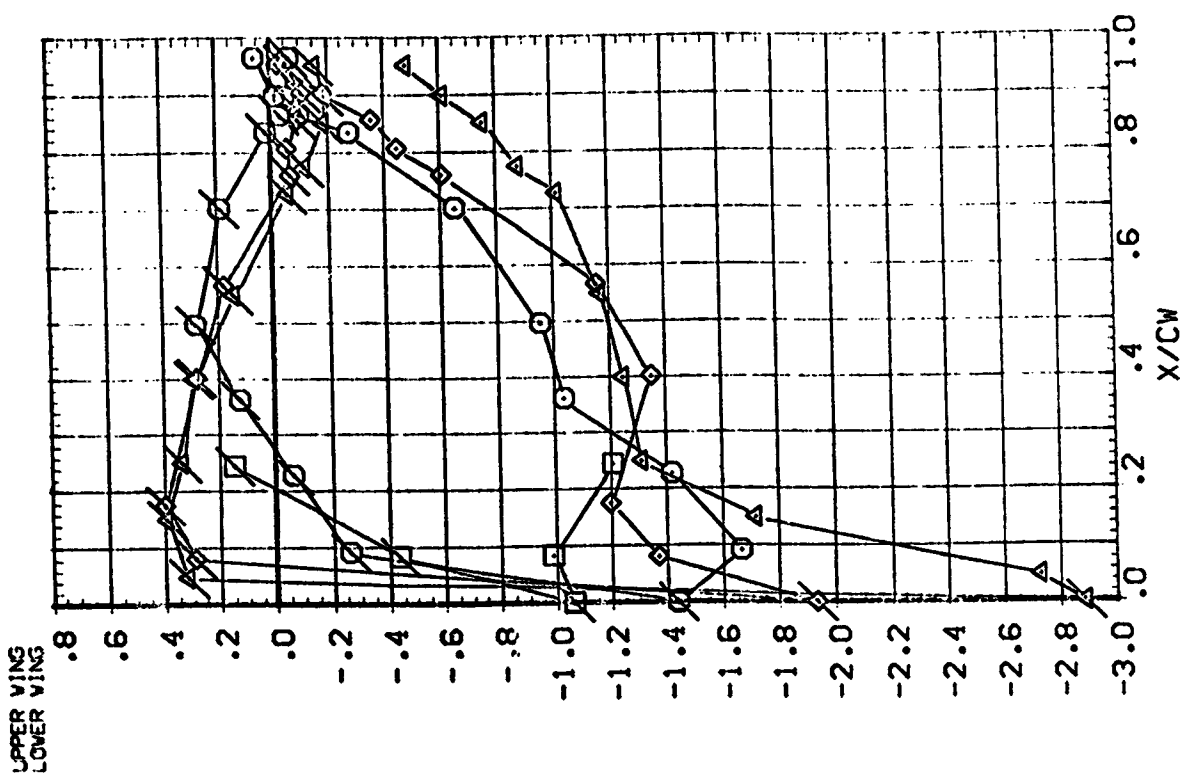
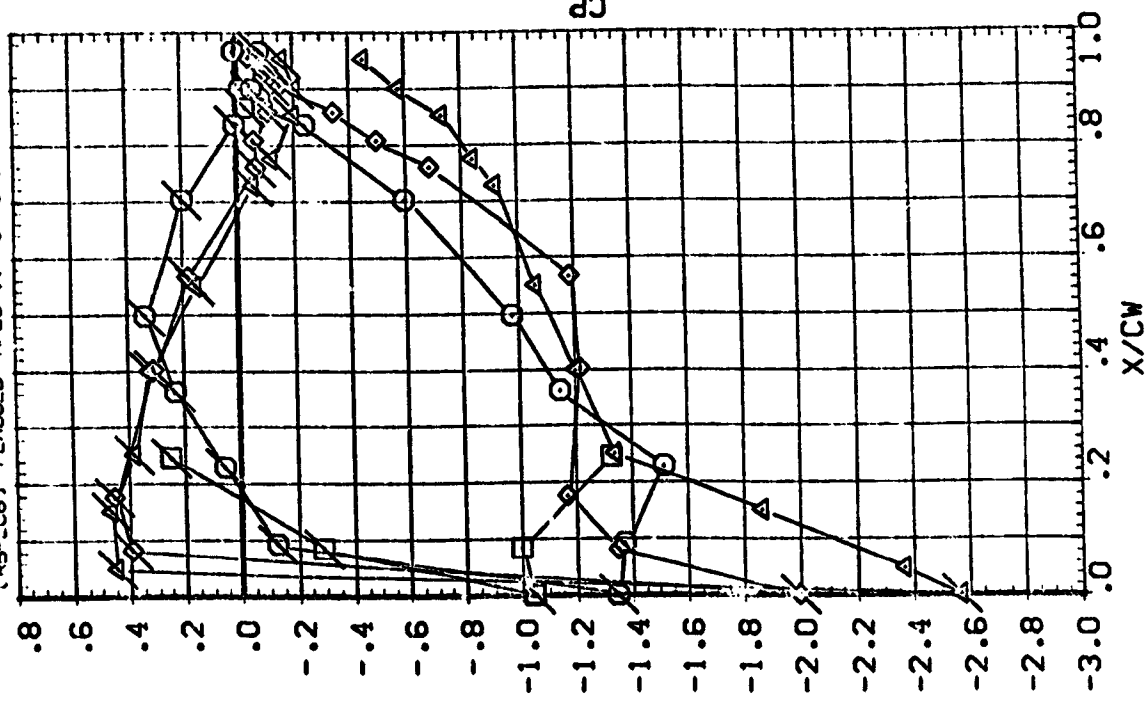
SYMBOL
○ □ ◇ △

Y/BN
.299
.364
.427
.534

BETA
5.210
10.360

MACH
.596

DATA SET SYMBOL CONFIGURATION DESCRIPTION
(RSP_C6) OPEN AYES 11-707 CA:2 C7A
(RSP_C6) FLAGGED AYES 11-707 CA:2 C7A



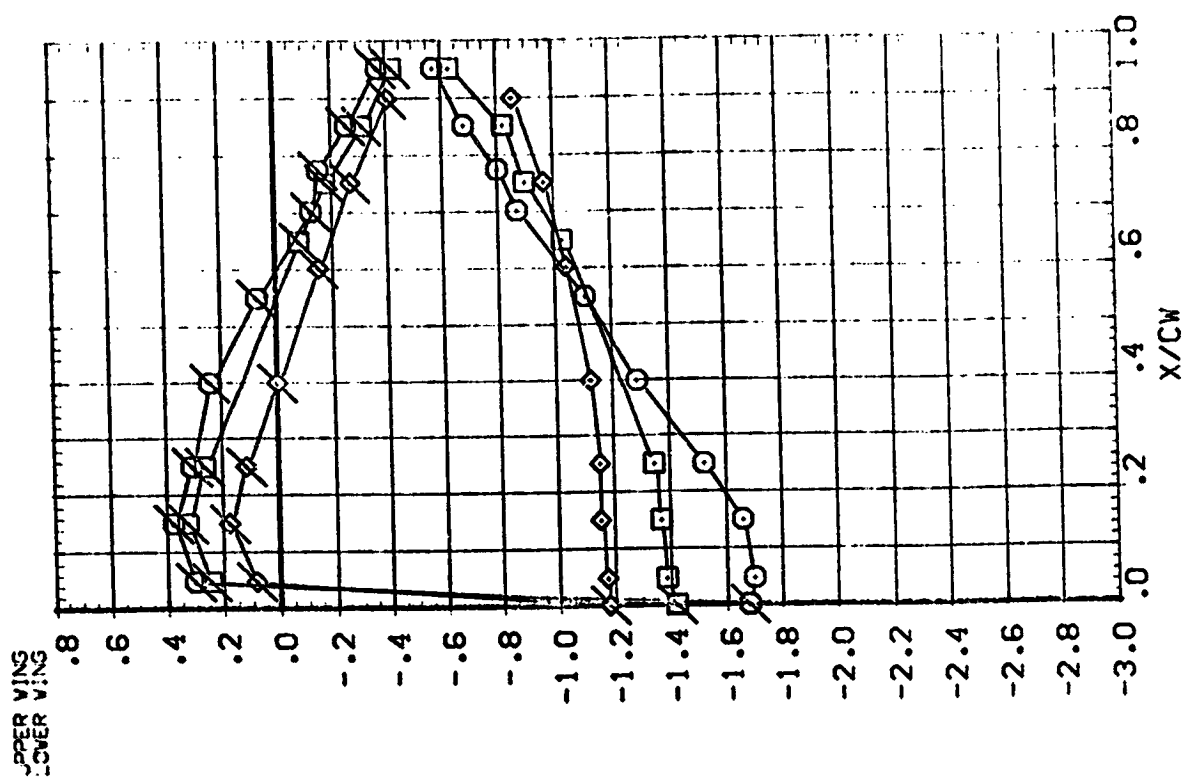
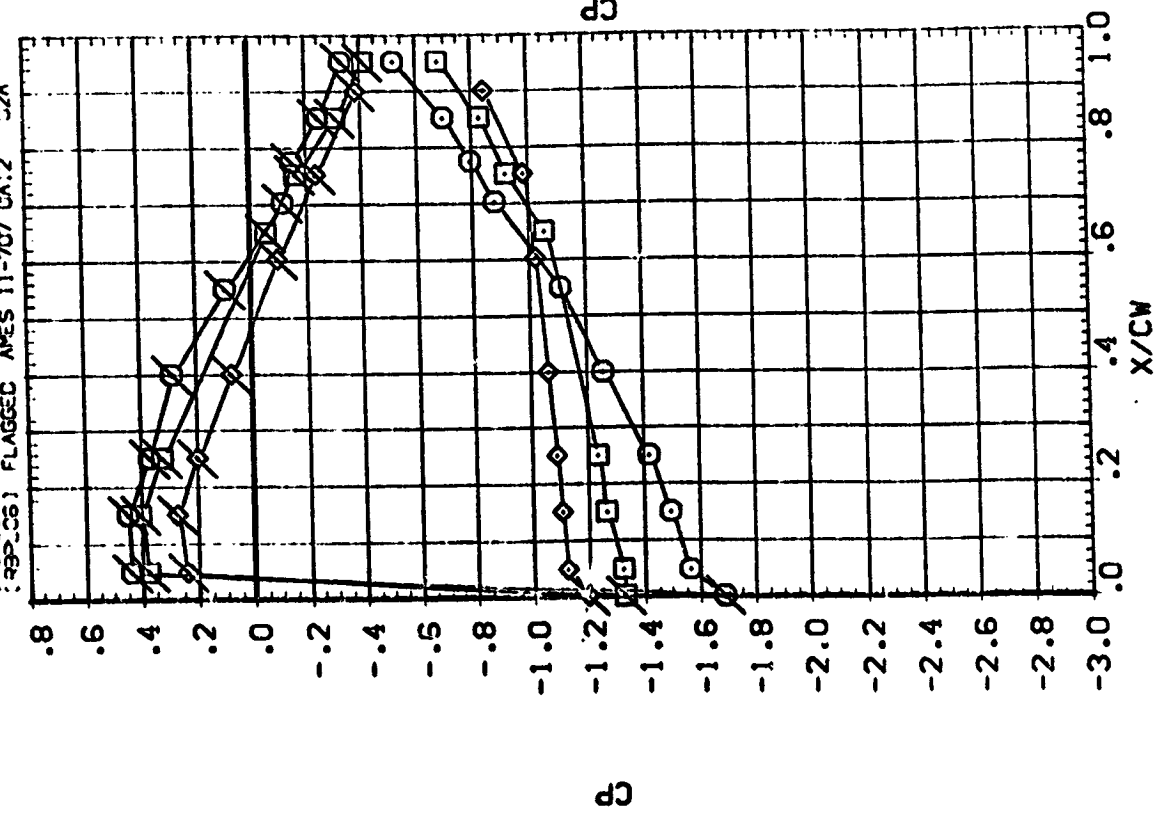
PARAMETRIC VALUES
ALPHA 20.000
ELEVON .000
RUDDER .000
RUJFLR .000

CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

ALPHA
ELEVON

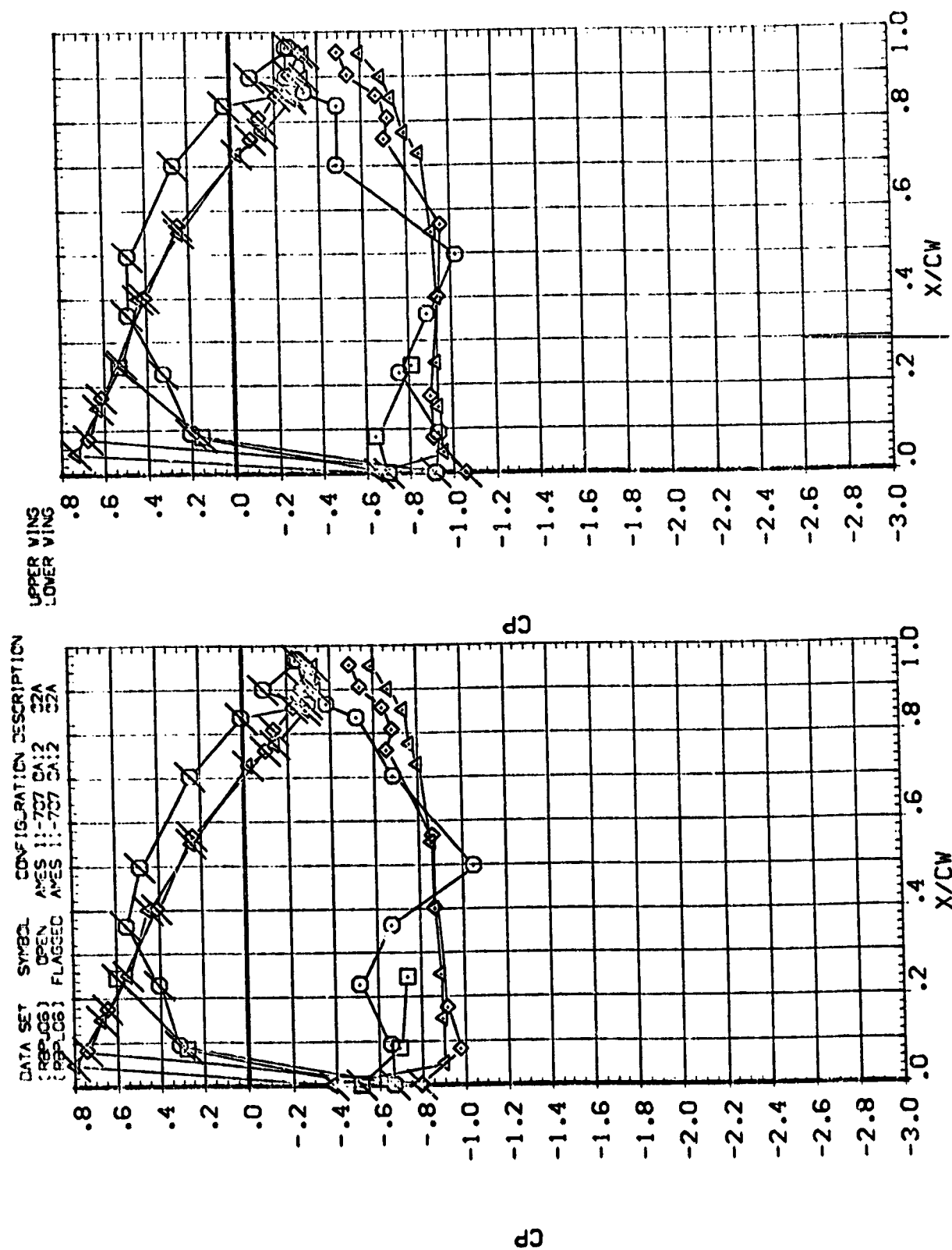
SYMBOL
V/EA
.573
.78C
.887

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 : 93-06 : OPEN AVES 11-707 CA:2 C2A
 : 93-06 : FLAGGED AVES 11-707 CA:2 C2A



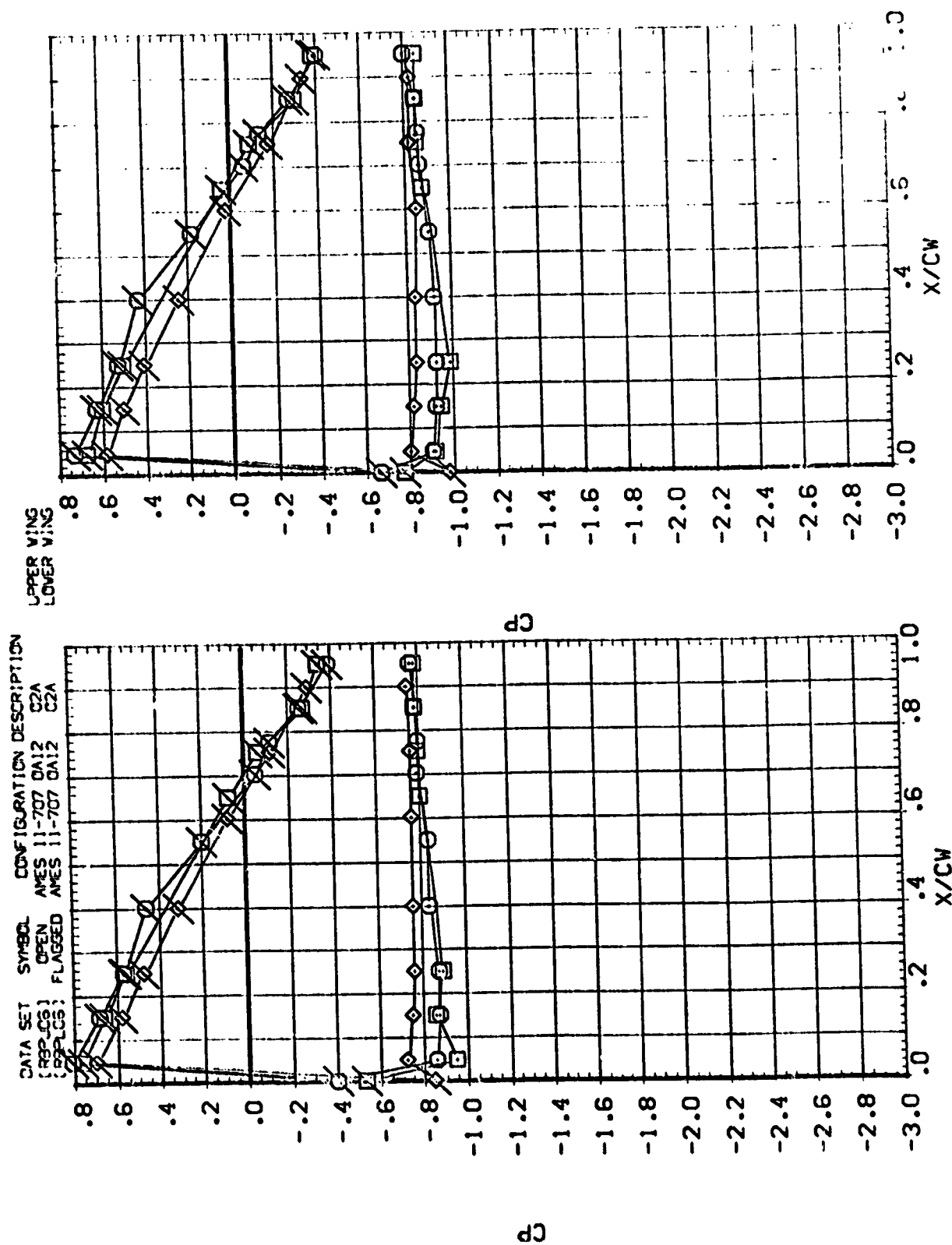
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

SYMBOL: \square \circ \triangle \diamond ∇
 Y/SW: .289 .364 .427 .534
 BETA: -10.110 -5.020
 MACH: .902
 ALPHA: 20.000
 ELEVON: .000
 RUDDER: .000
 RUDFLR: .000
 HARMONIC VALUES: .000 .000



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

ALPHA	20.000	20000	000
ELEVON	.000	00000	000



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES



SYMBOL
□
◇
△

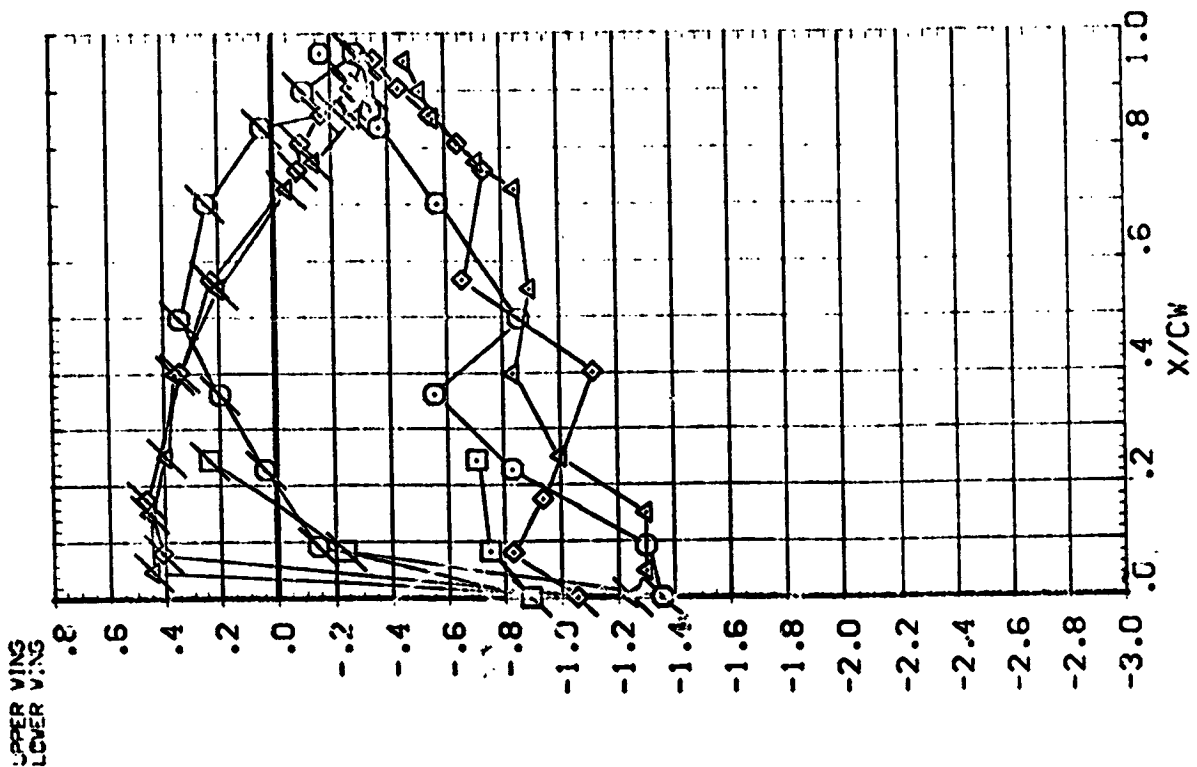
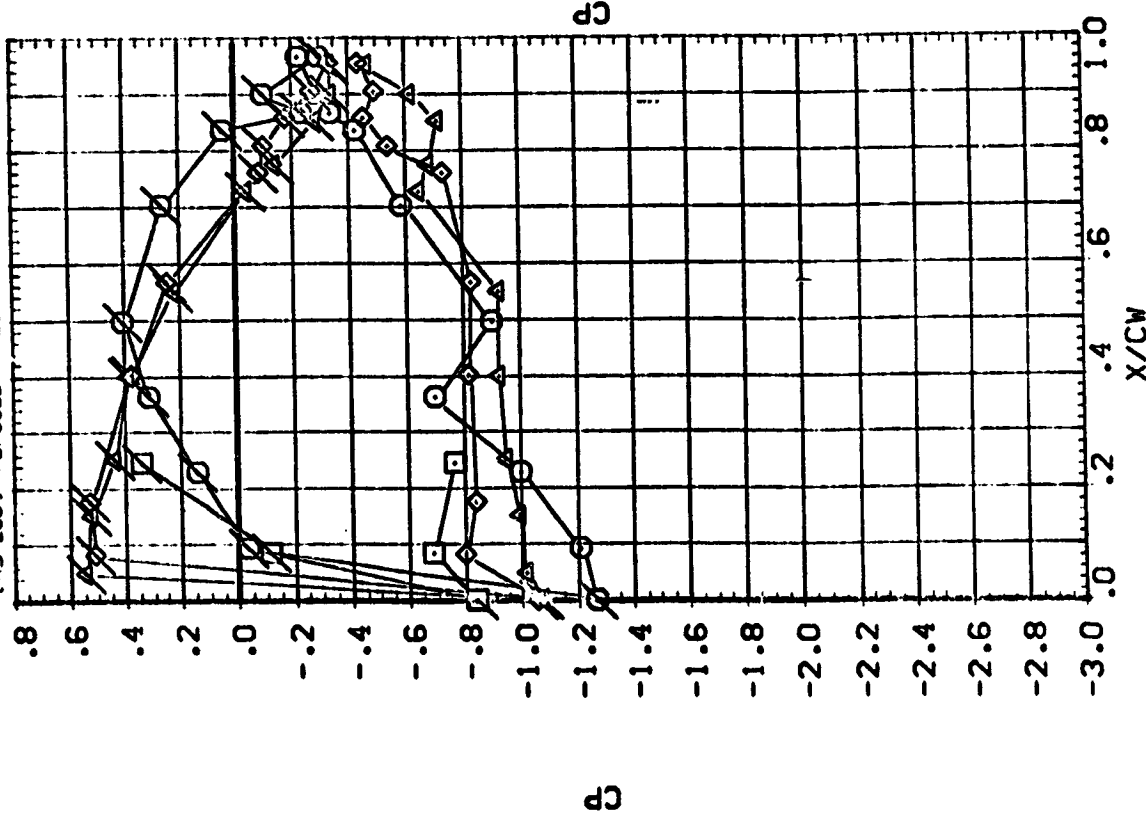
Y/BN
.299
.364
.427
.534

BETA
5.260
10.420

MACH
.902

PARAMETRIC VALUES
ALPHA
ELEVON
20.000
.000
20.000
20.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
(RBP-05) OPEN AYES 11-707 CA12 C2A
(RBP-05) FLAGGED AYES 11-707 CA12 C2A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 20.0000 P ADDER .0000
 .0000 RUTLER .0000

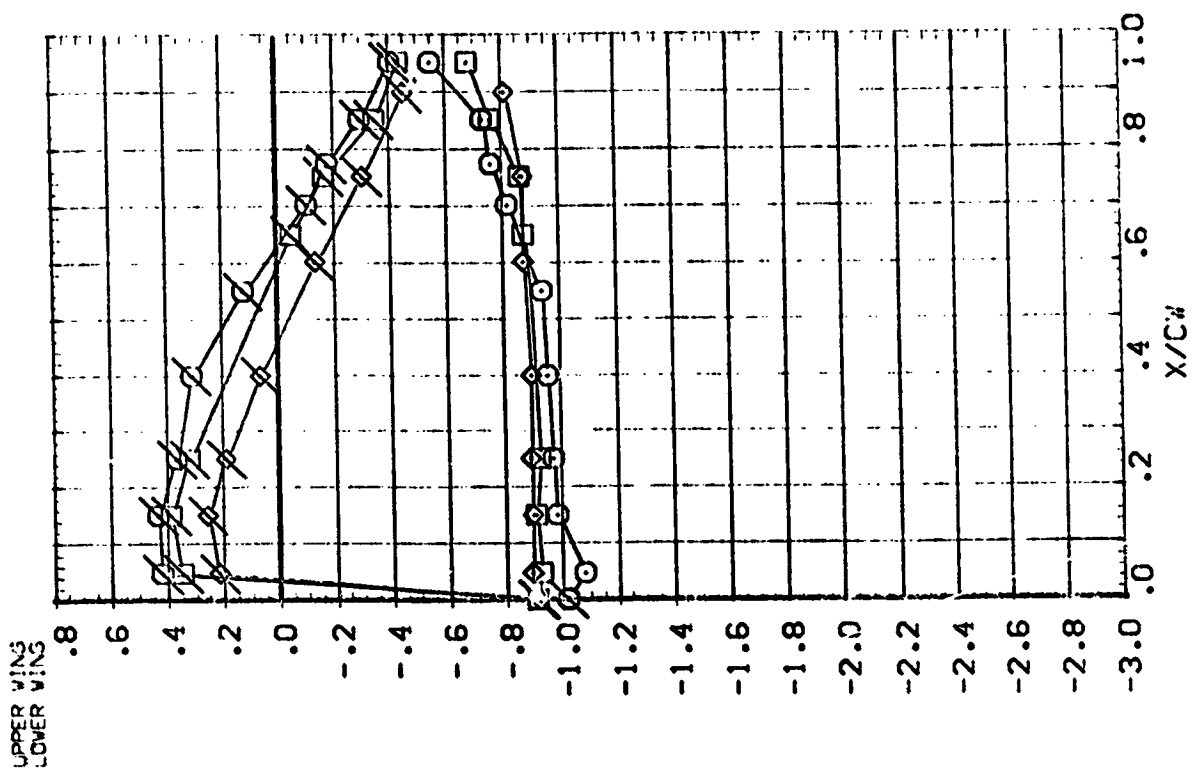
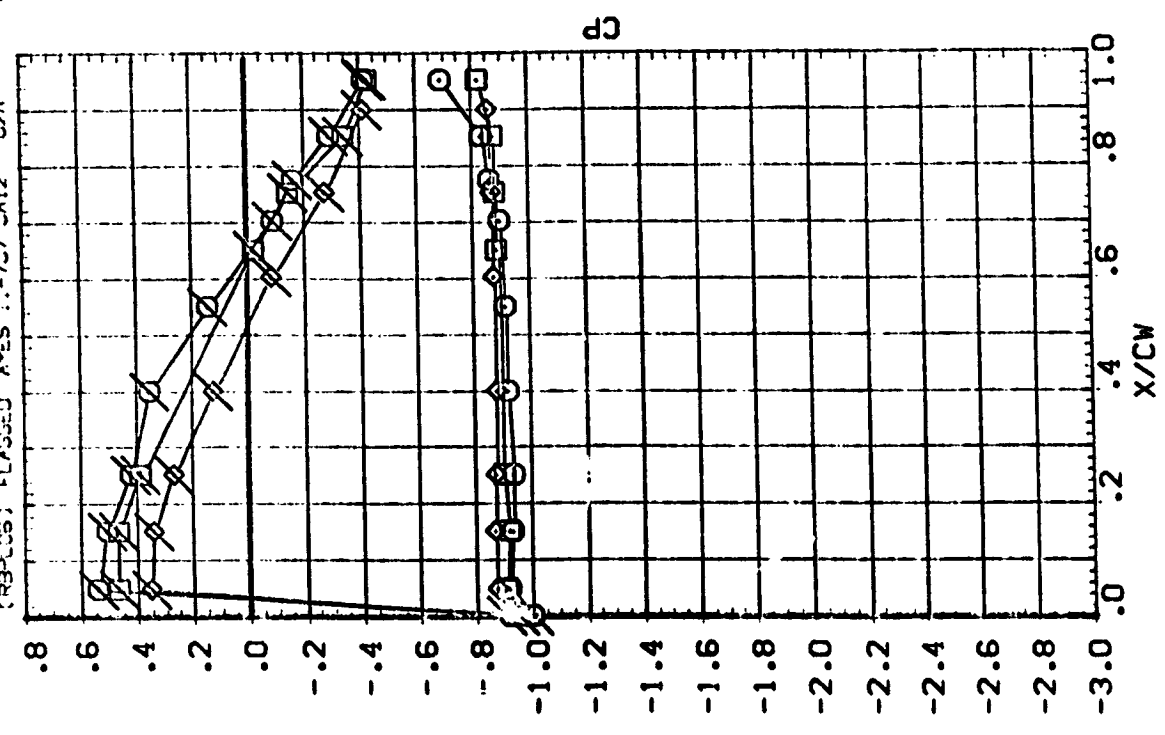
ALPHA
 ELEVON

SYNCH
 .673
 .780
 .857

BETA
 .902

MACH
 .902

DATA SET SYMBO- CONFIGURATION DESCRIPTION
 (RBP-08) OPEN AVES 11-707 CA12 02A
 (RBP-08) FLASSED AVES 11-707 CA12 02A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES



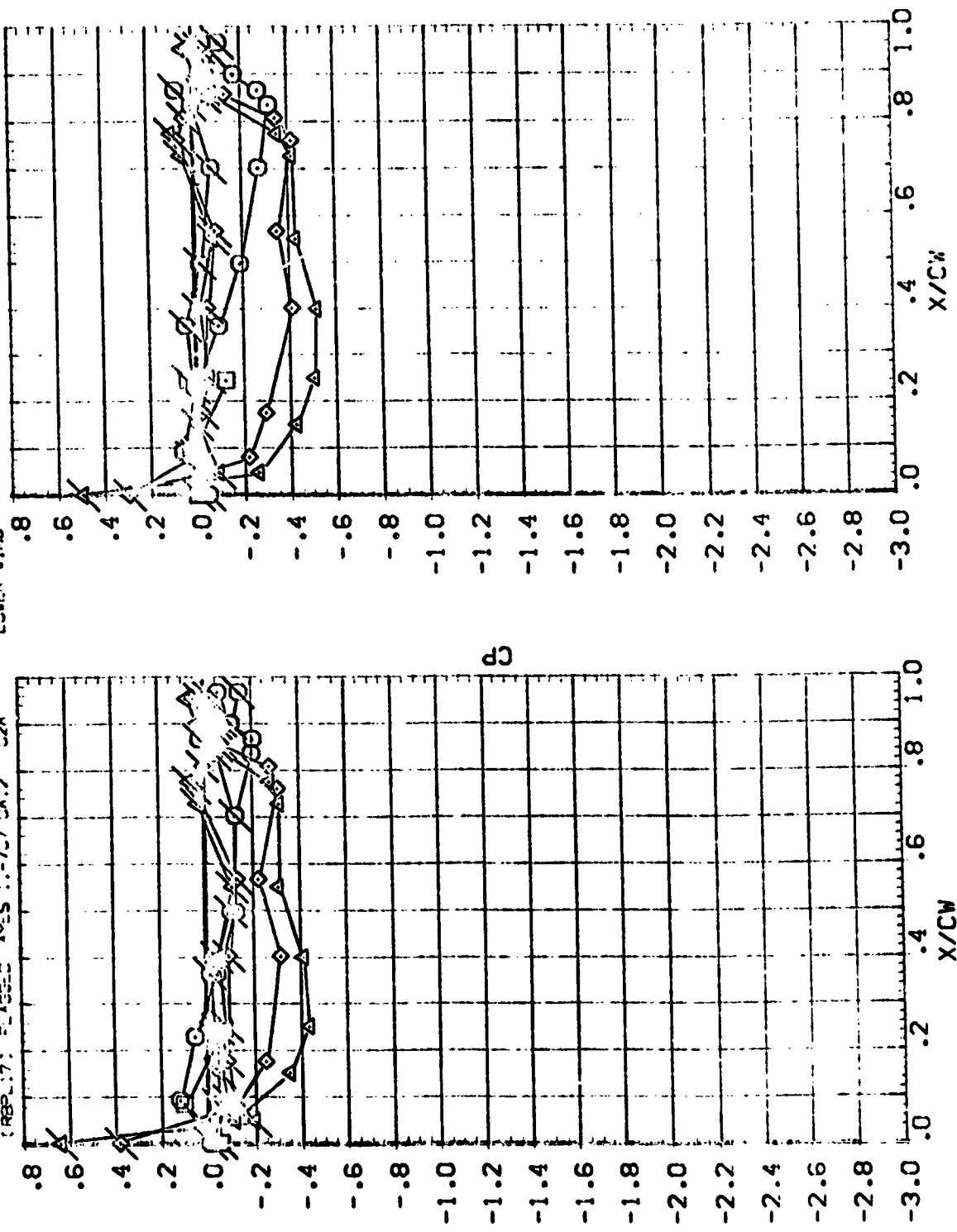
SYNCH-
Y/BN
.299
.354
.427
.534

BETA
10.000
.080

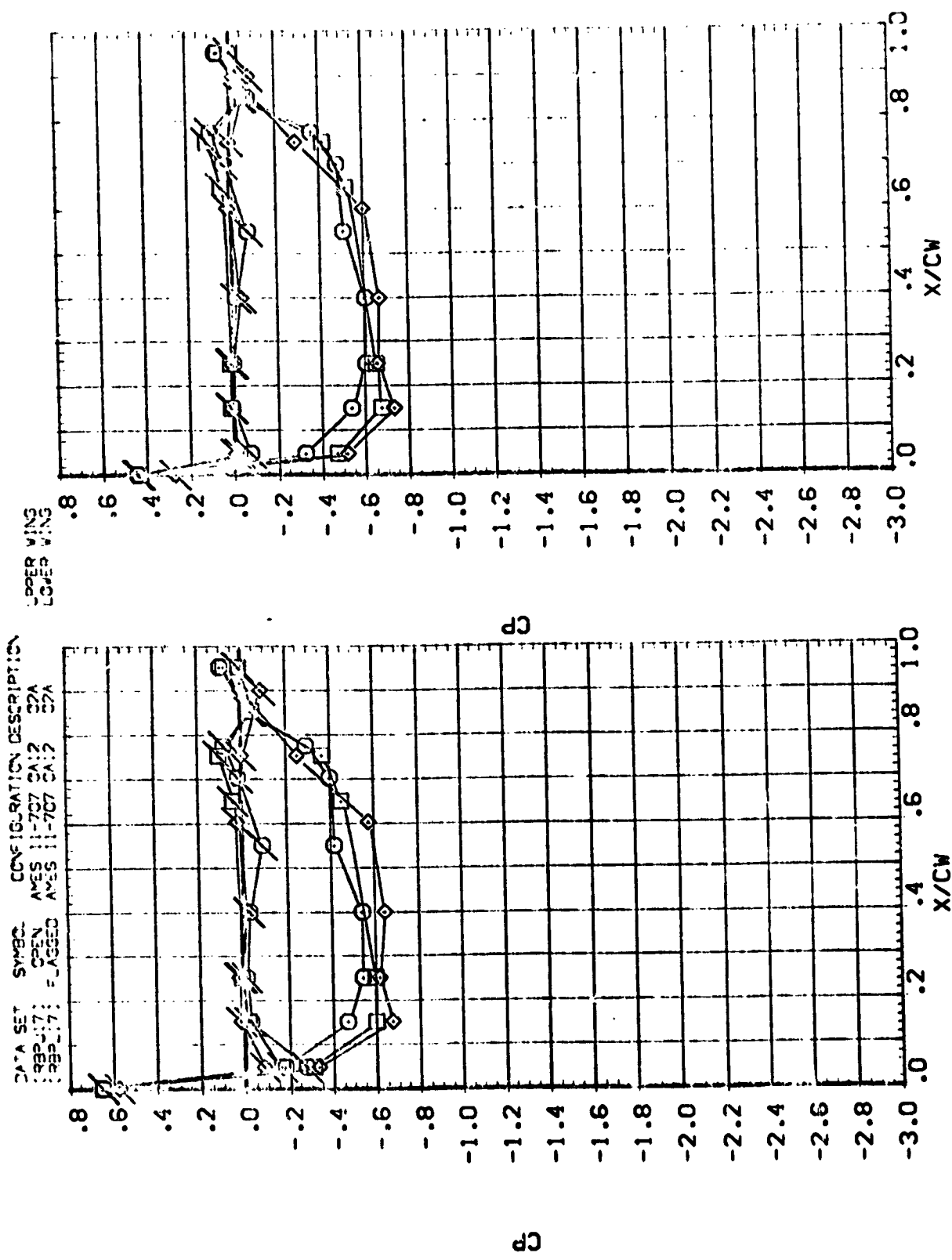
MAC-
.587

PARAMETRIC VALUES
ALPHA
ELEVON
10.000
RUDLER
RUDLER
.000
.000
.000

DATA SET SYMBO
(RBL17) OPEN
(RBL17) FLAGGED
CONFIGURATION DESCRIPTION
AXES 11-727 2A12 02A
AXES 11-727 2A12 02A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES



SYMBOL Y/BU BETA MACH

○ .289 10.370 .597

□ .354

◇ .427

△ .534

PARAMETRIC VALUES

ALPHA .000

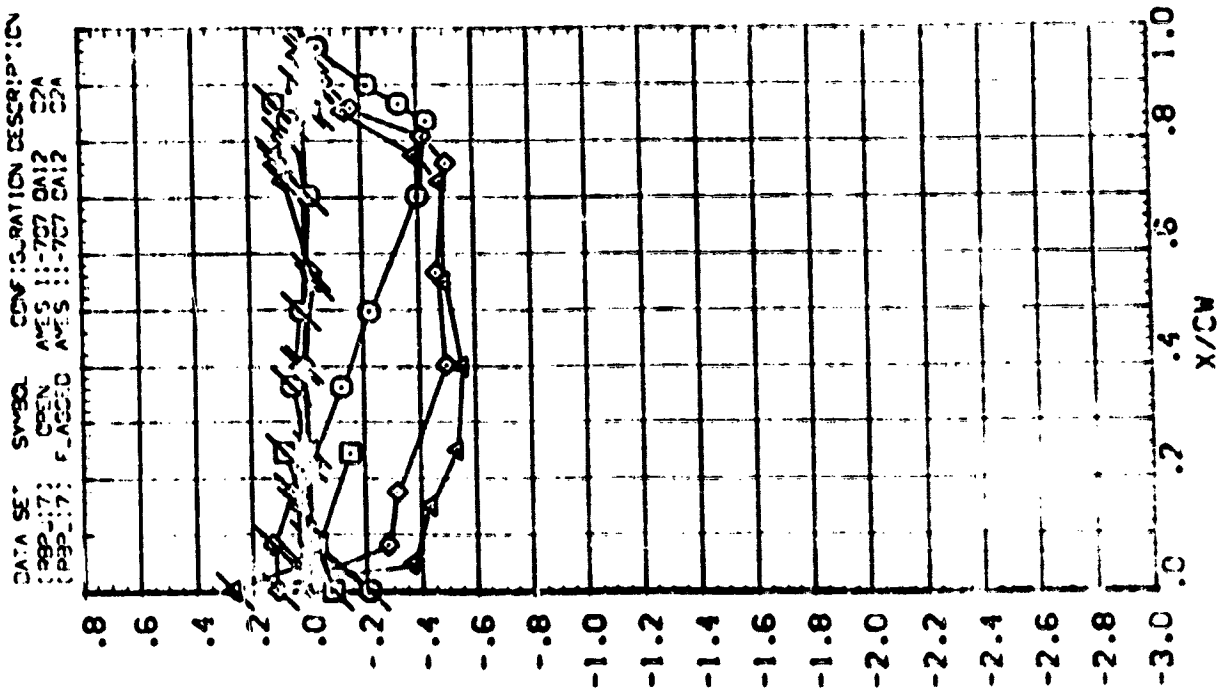
ELEVATION .000

ROLL .000

YAW .000

UPPER WING

LOWER WING

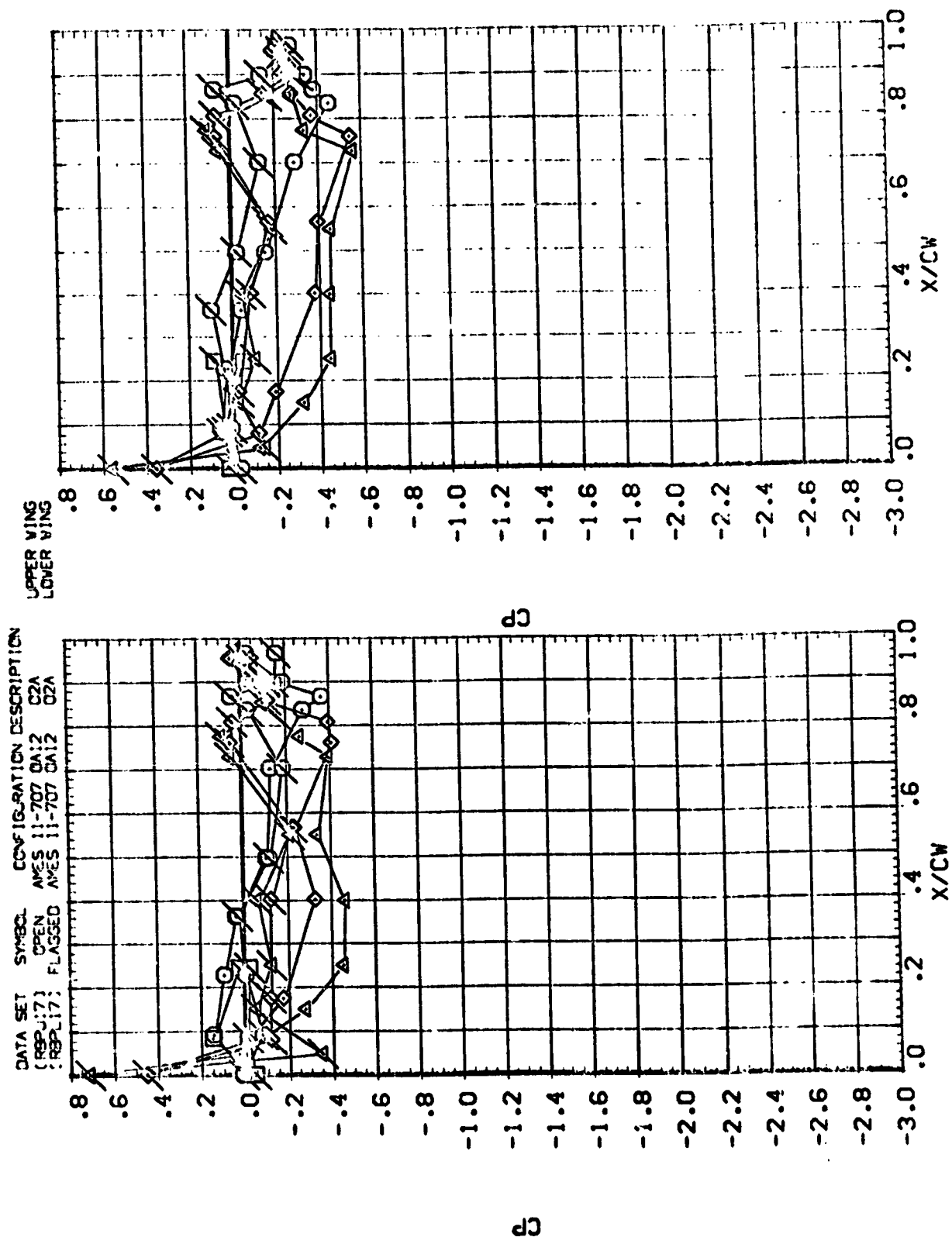


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

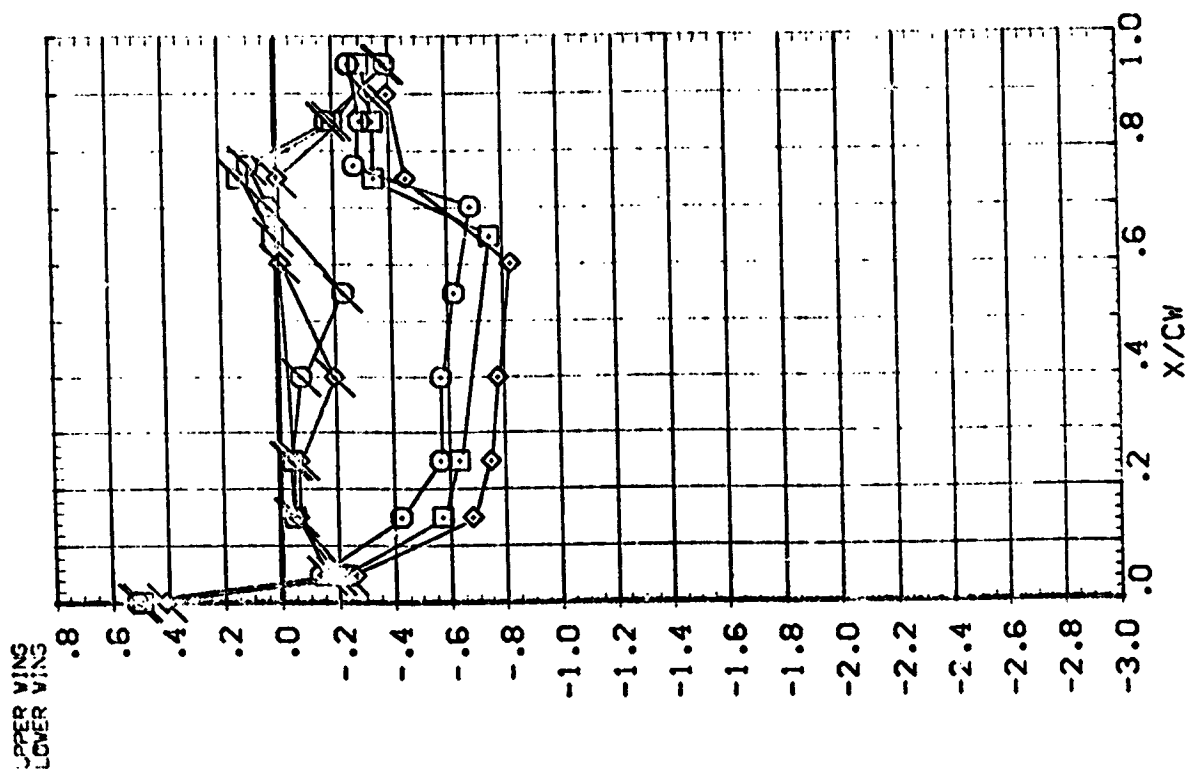
99
• •
00
00
00
00



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

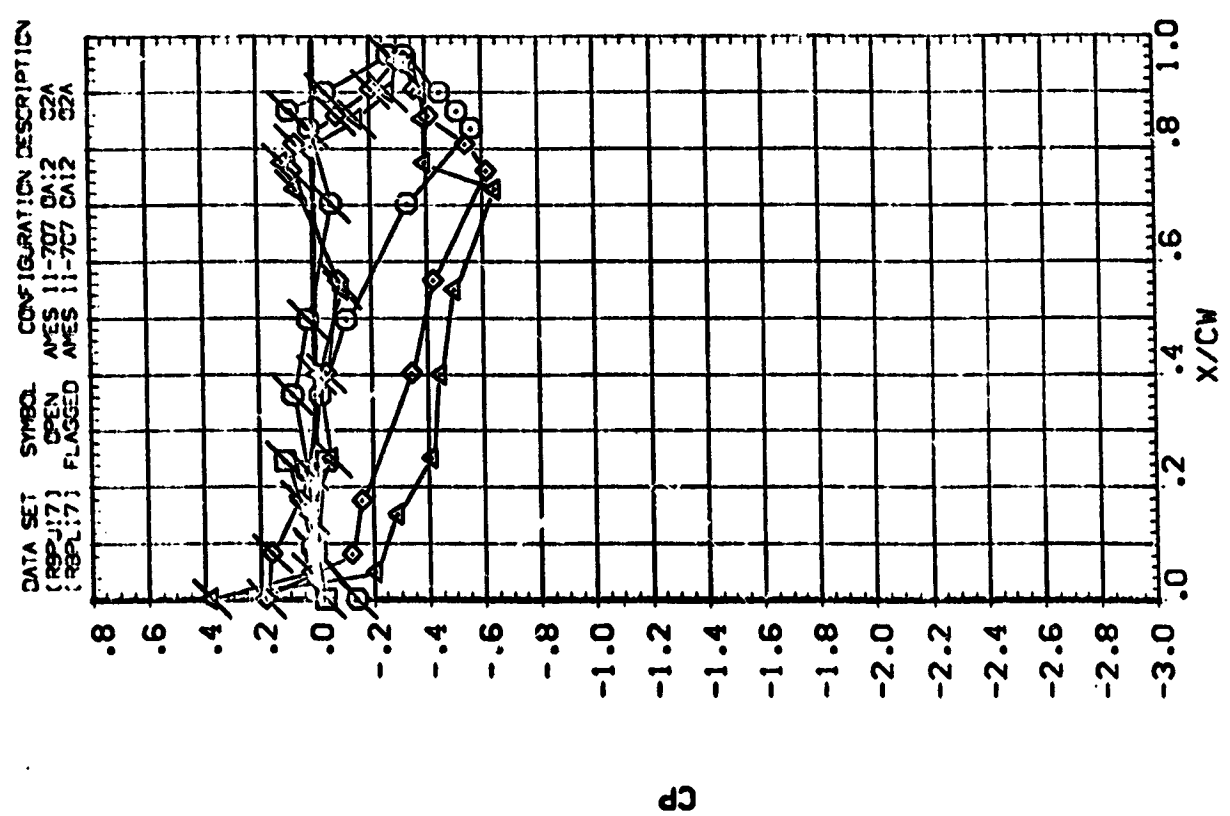


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 .000 .000 .000
 .000 .000 .000
 10.000 10.000 10.000

ALPHA
 ELEVON

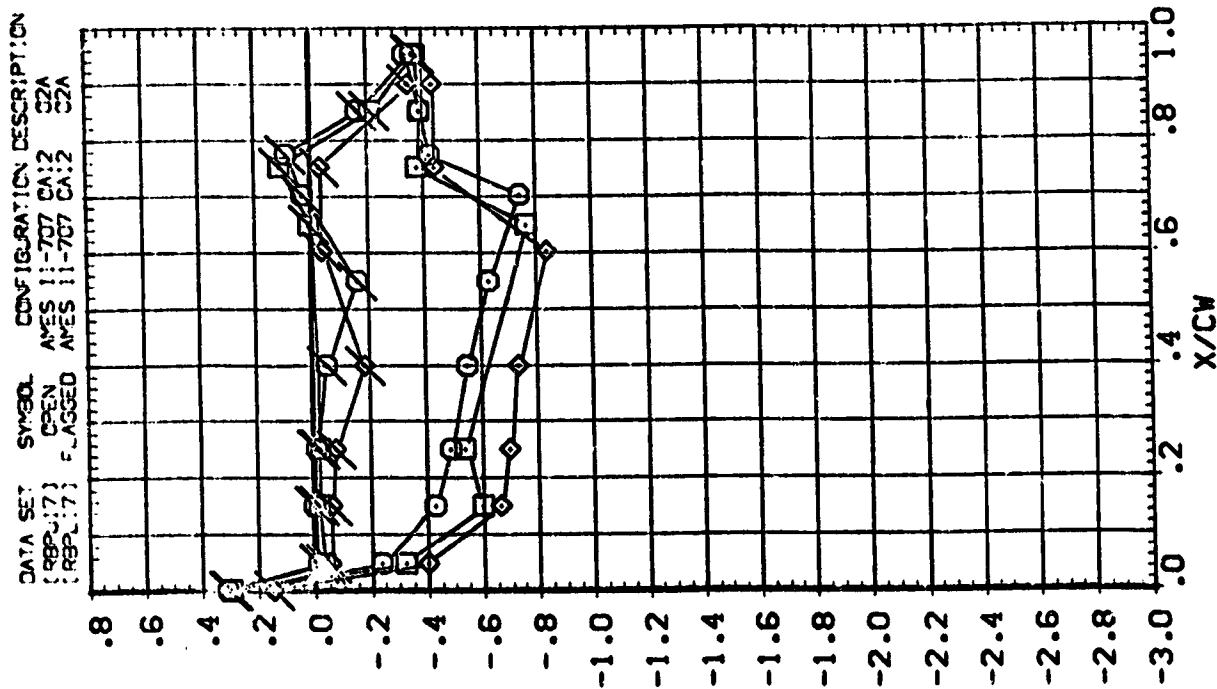
UPPER WING
 LOWER WING



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

93

UPPER WING
LOWER WING



93

CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 :0.000 RUDDER
 :0.000 RUDDLR
 :0.000

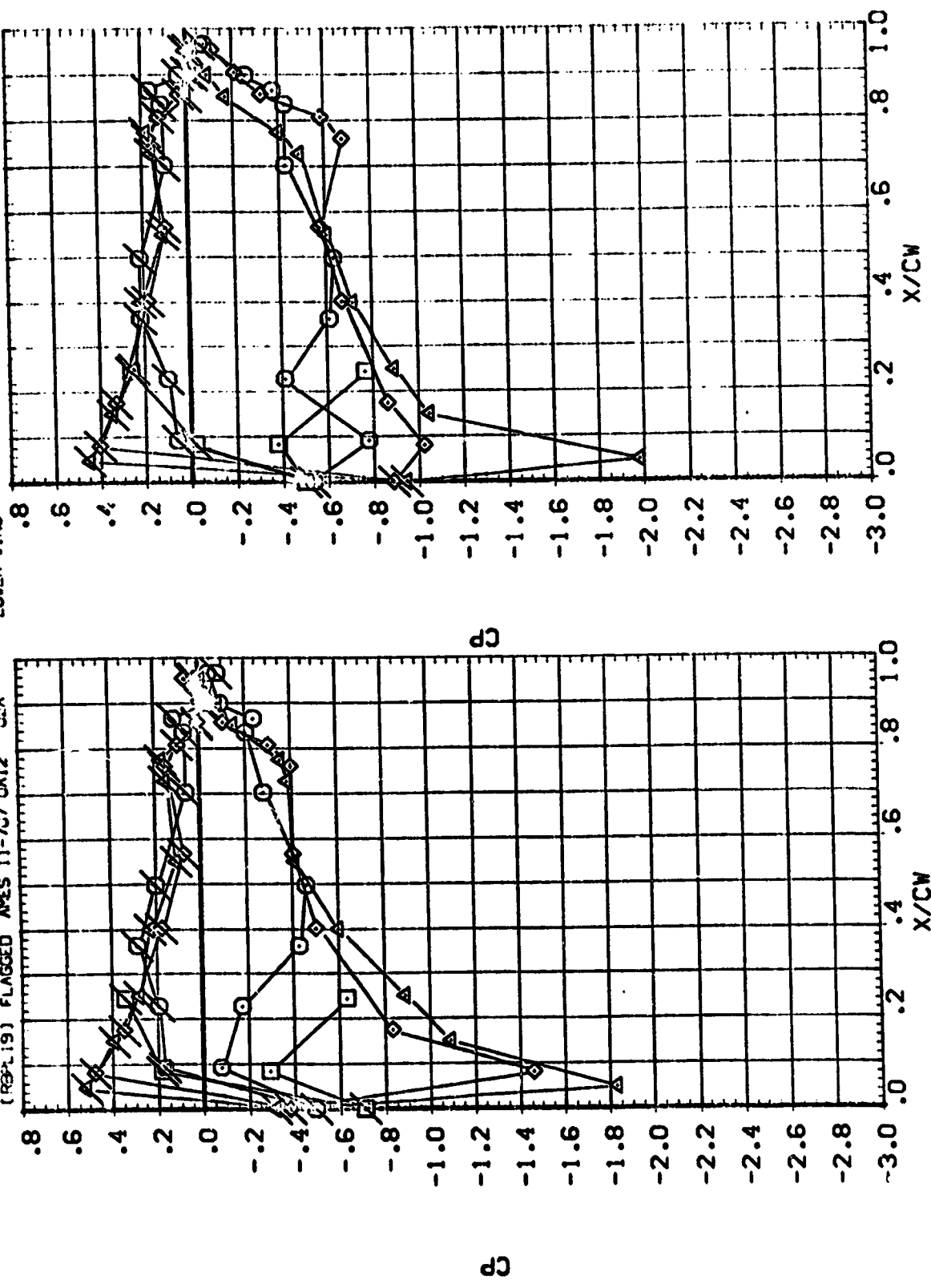
ALPHA
 ELEVON

Y/BV .299
 .364
 .427
 .534

BETA -10.110
 .080

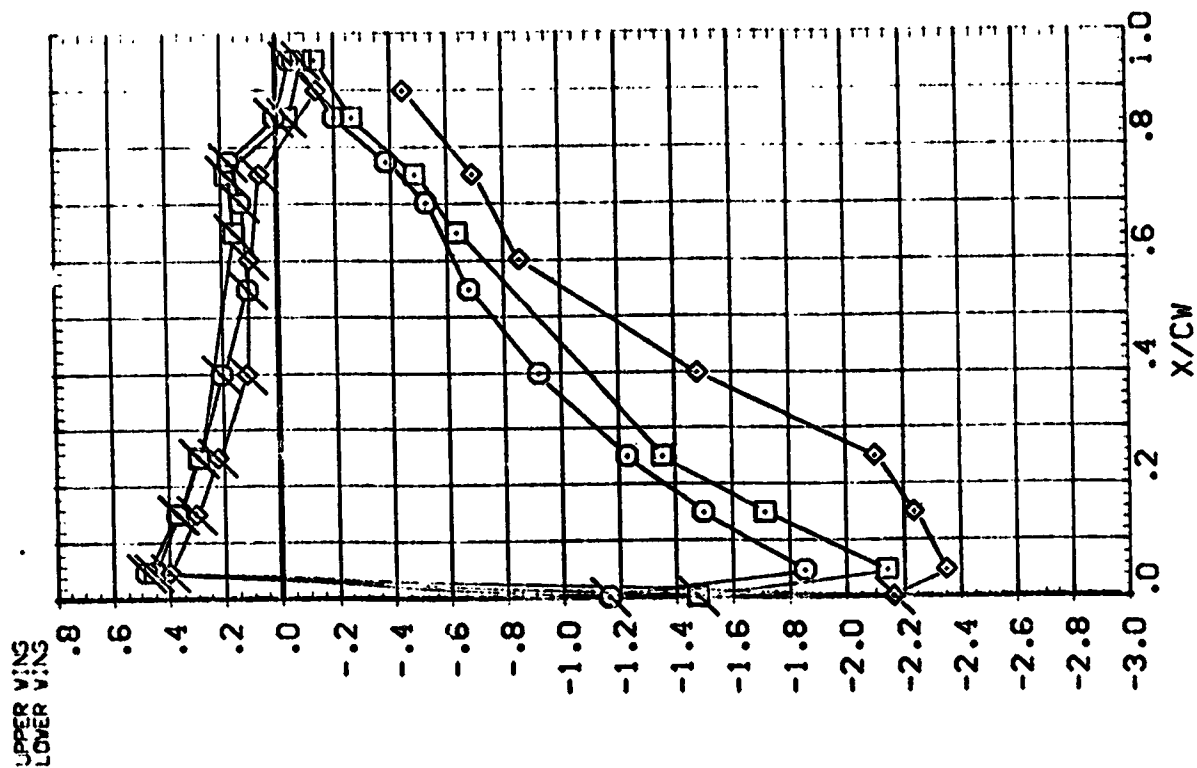
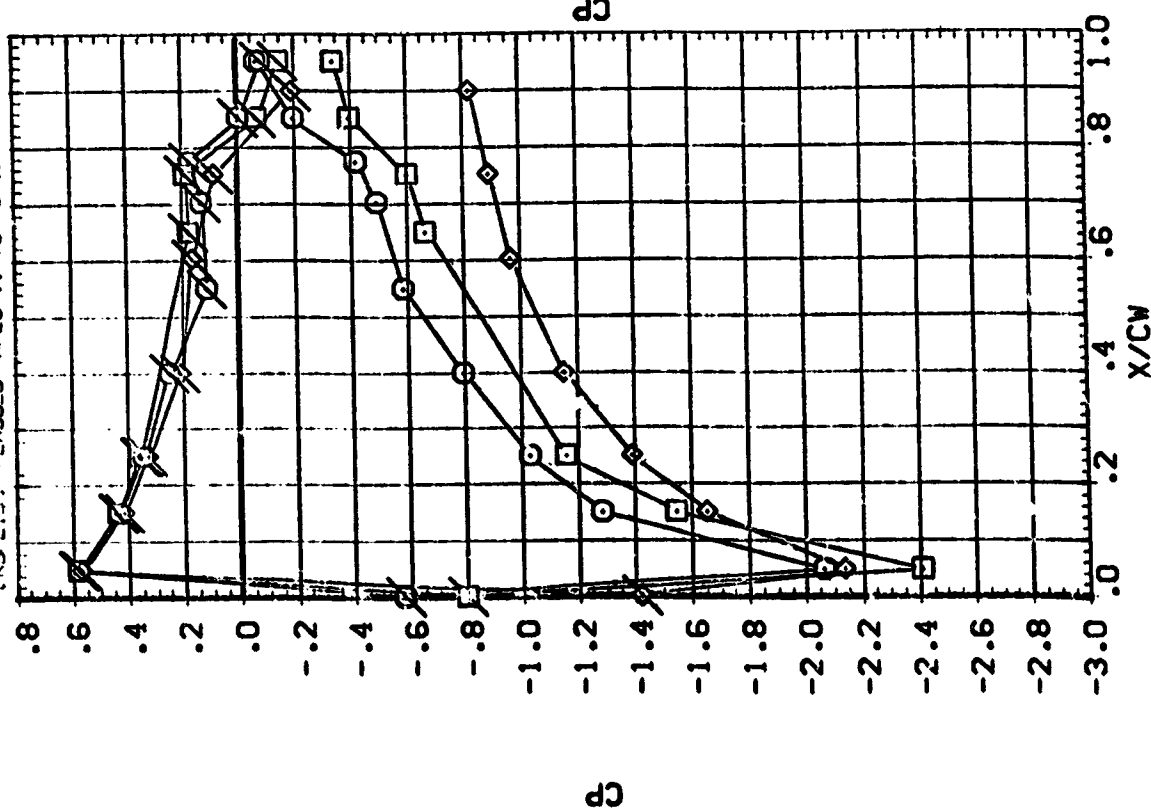
MACH .589

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REF 19) OPEN APES 11-707 DA12 D2A
 (REF 19) FLAGGED APES 11-707 DA12 D2A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REP-18) OPEN AVES 11-707 QAI2 Q2A
 (REP-18) FLAGGED AVES 11-707 QAI2 Q2A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES



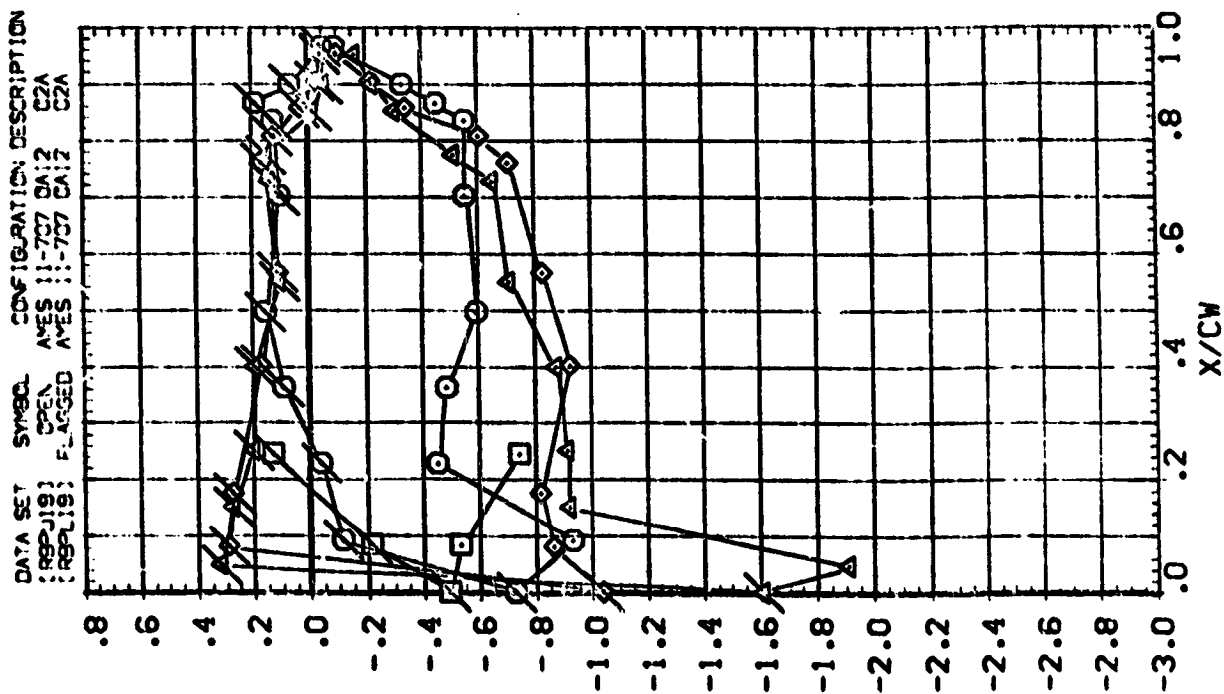
SYMBOL
 .299
 .364
 .427
 .534

BETA
 :0.270

MACH
 .599

PARAMETRIC VALUES
 10.000
 10.000
 10.000

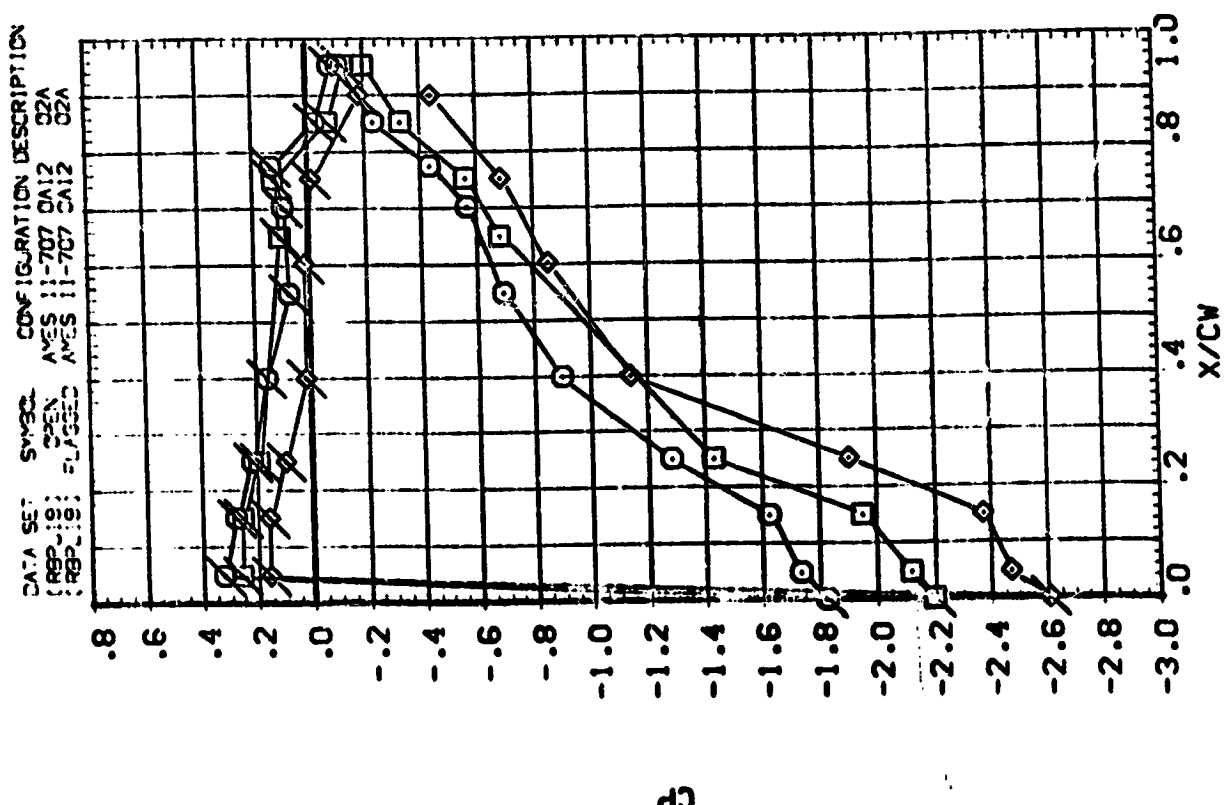
ALPHA
 ELEVON



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

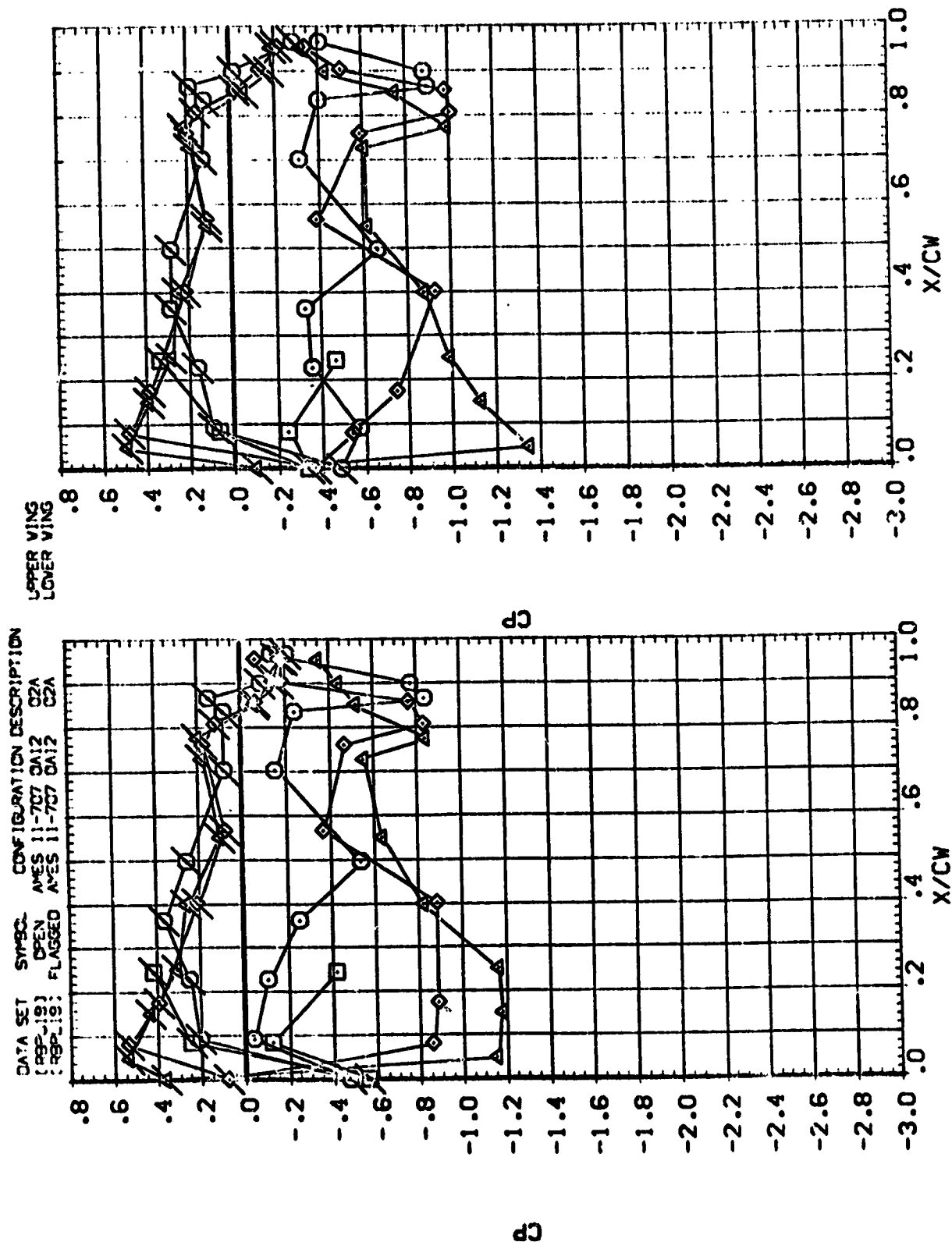
UPPER WING
 LOWER WING





PARAMETRIC VALUES
 ALPHA 10.000
 ELEVON 10.000
 RUDDER 10.000
 RUDDER 10.000

SYNCH V/BV BETA MACH
 .299 -13.210 .904
 .304 .080
 .427
 .534



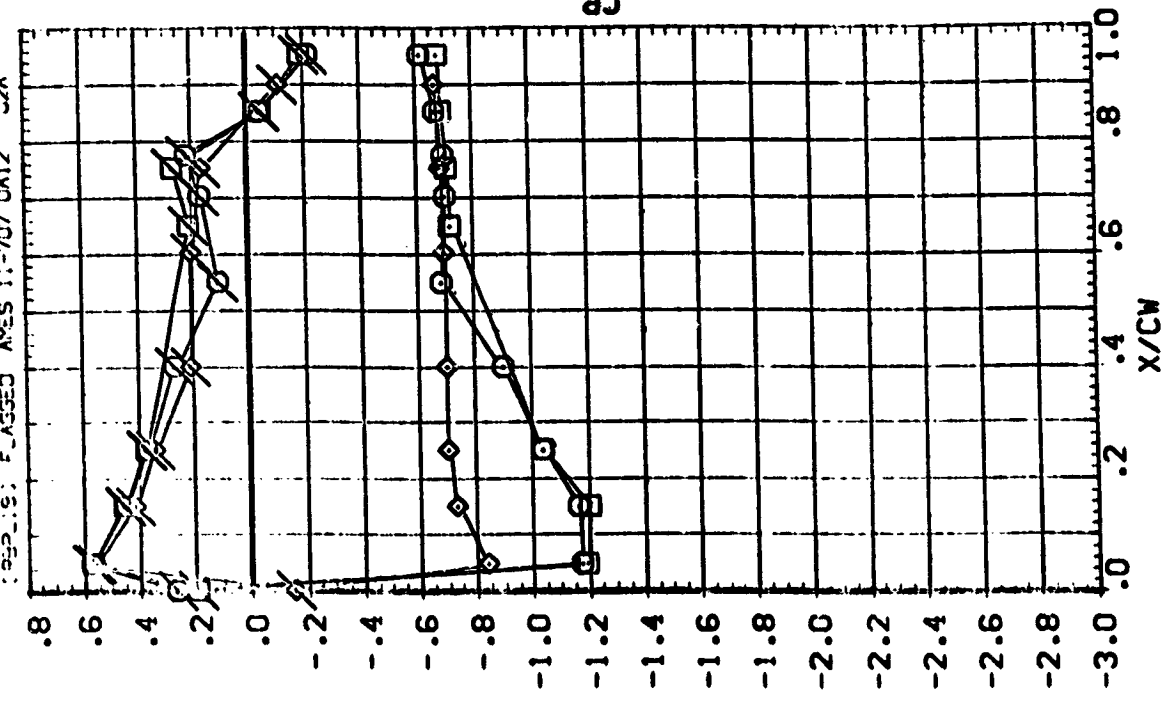
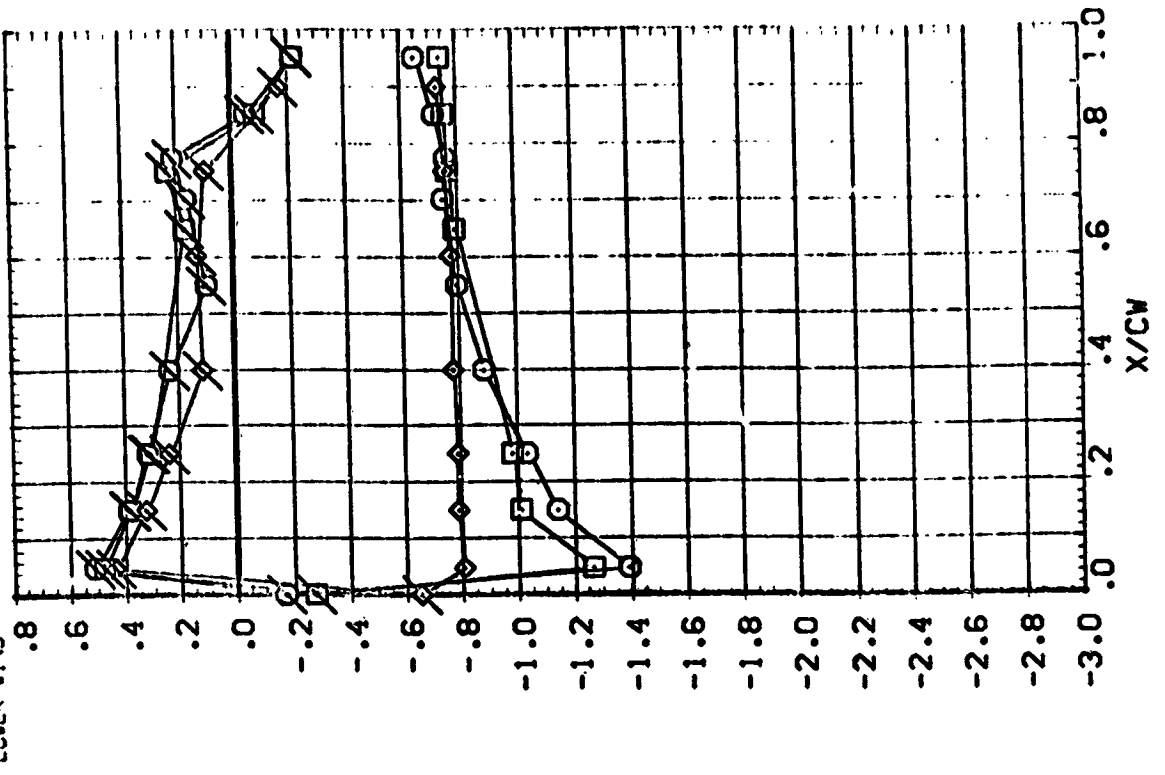
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA 10.000 R200P .000
 ELEVON 10.000 R200P .000

ALPHA
 ELEVON

SVWBC Y/BV BC'A MACH
 .573 .10.210 .924
 .780 .090
 .887

DATA SET SVWBC CONFIGURATION DESCRIPTION
 :REP:18: OPEN AXES 11-707 OA12 02A
 :REP:19: FLAGGED AXES 11-707 OA12 02A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES



SYMBOL Y/BV
 .289
 .364
 .427
 .534

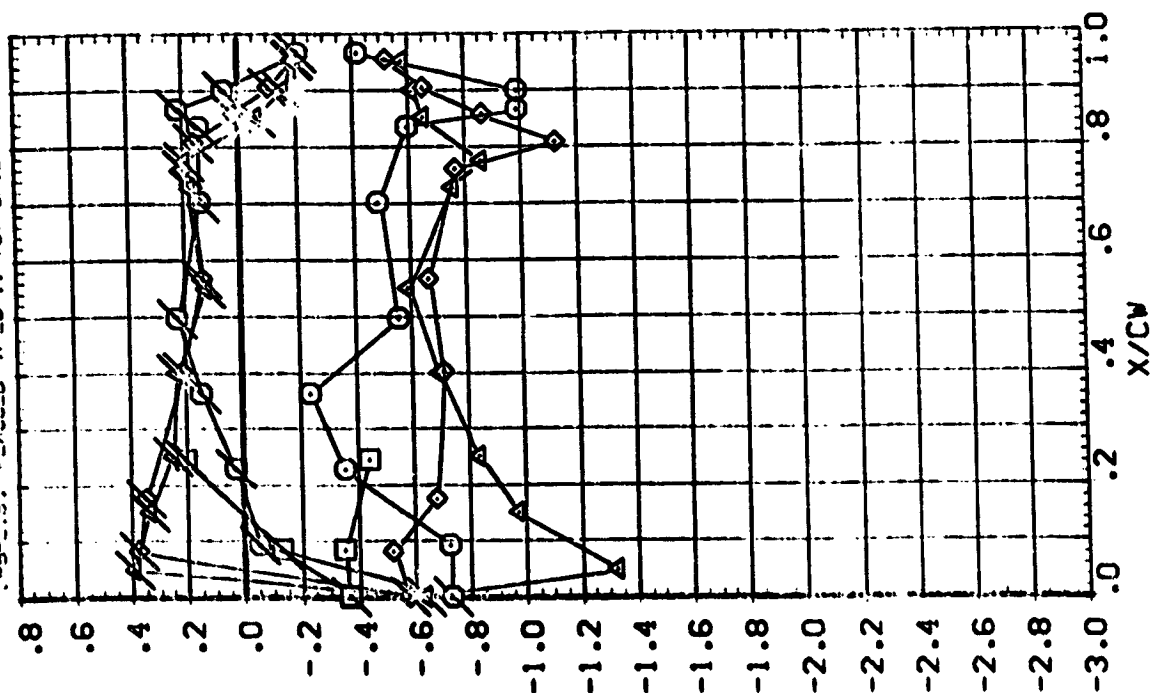
BETA MACH
 10.390 .904

PARAMETRIC VALUES
 10.000
 10.000
 10.000

ALPHA
 ELEVEN

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 892 18 OPEN AYES 11-707 DAI2 D2A
 893 18 FLAGGED AYES 11-707 DAI2 D2A

UPPER WING
 LOWER WING



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

SECRET

۱۰۰

644

AC- 604

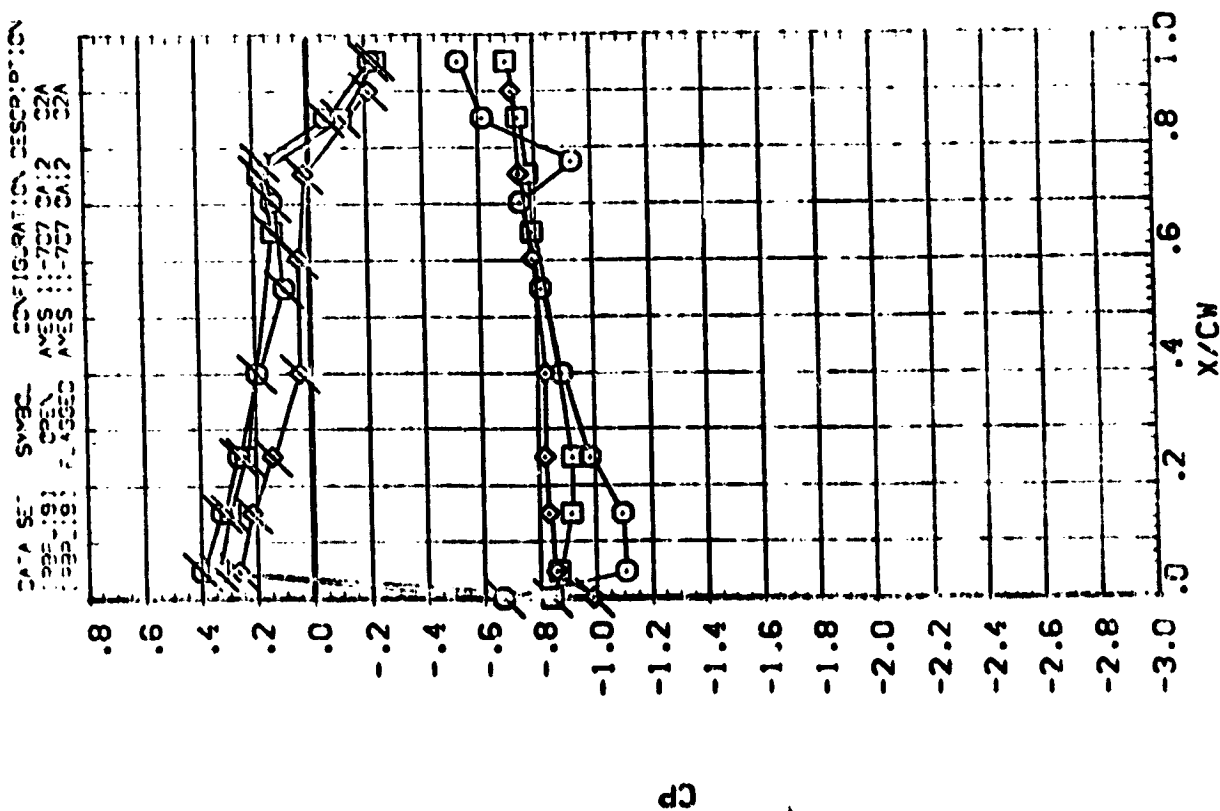
3-1
3-2

٢٢٢

5

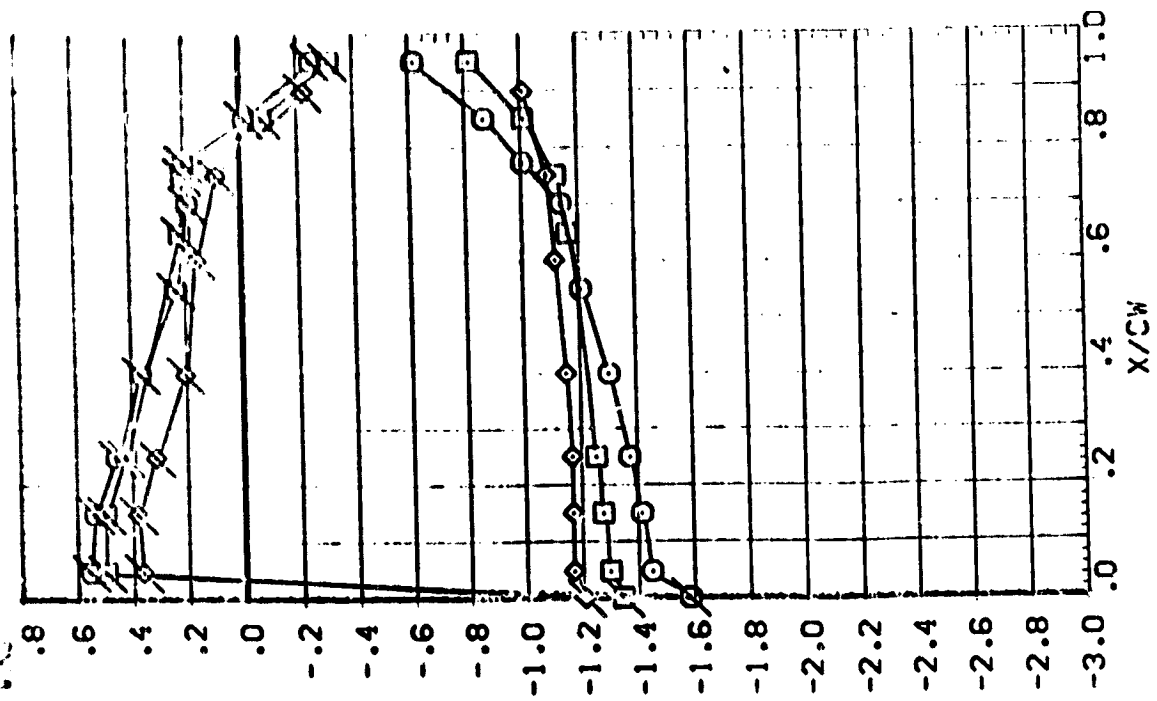
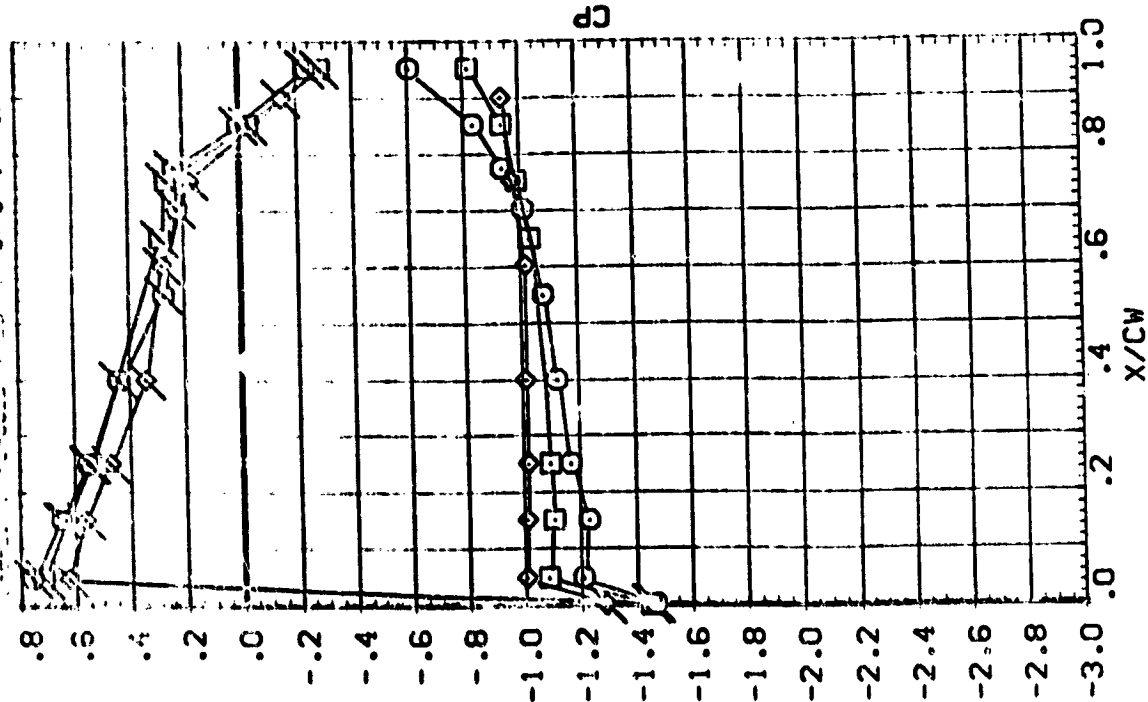
1

DATE: 11/11/11



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

22
23
24
25
26



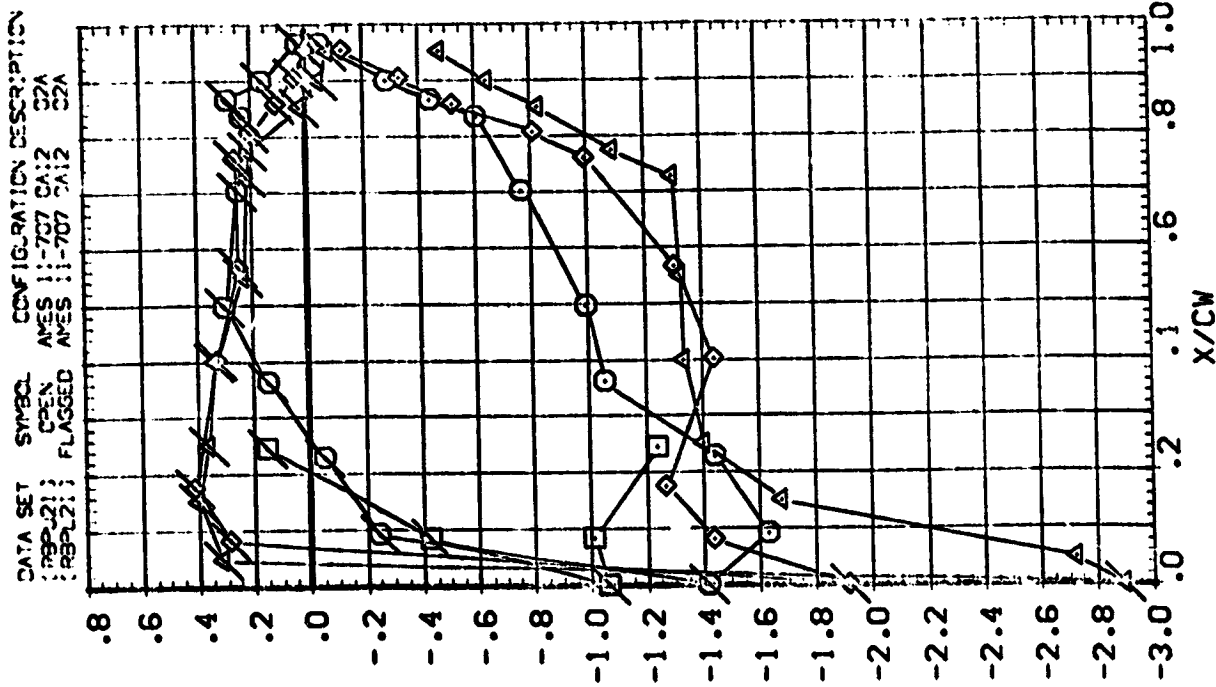
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES



SYMBOL Y/BN
 .299
 .364
 .427
 .534

BETA 10.370 MACH .600

PARAMETRIC VALUES
 ALPHA 20.000
 ELEV 9.000
 10.000 9.000



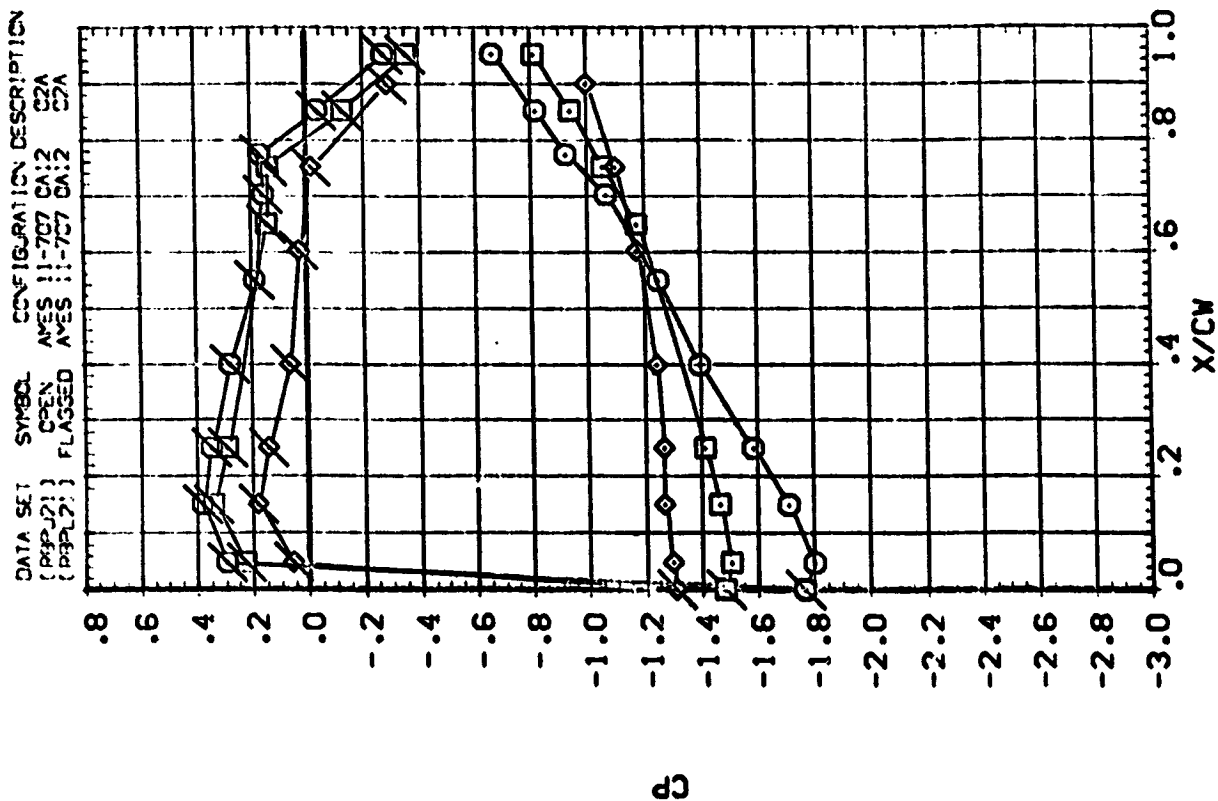
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
20.000 RUDDER
10.000 RUDDER

ALPHA
ELEVEN

SYMBOL Y/BV BETA MACH
.673 10.370 .600
.780
.887

UPPER WING
LOWER WING



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

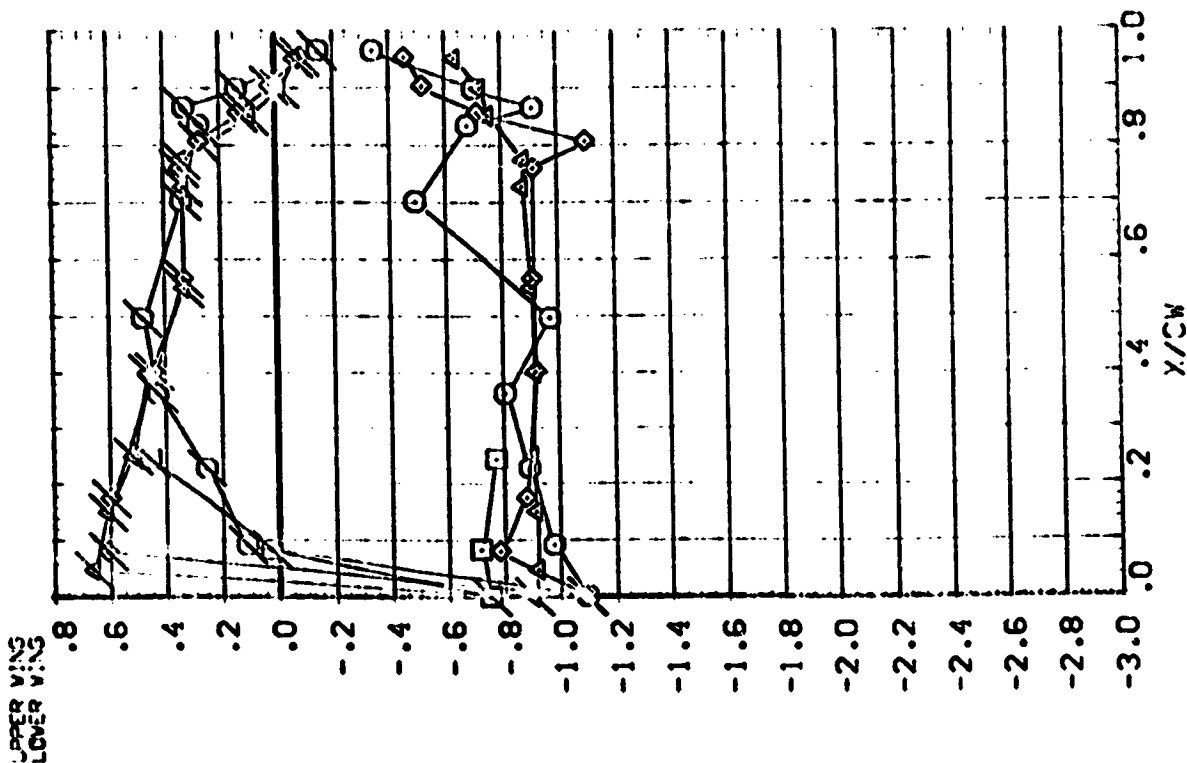
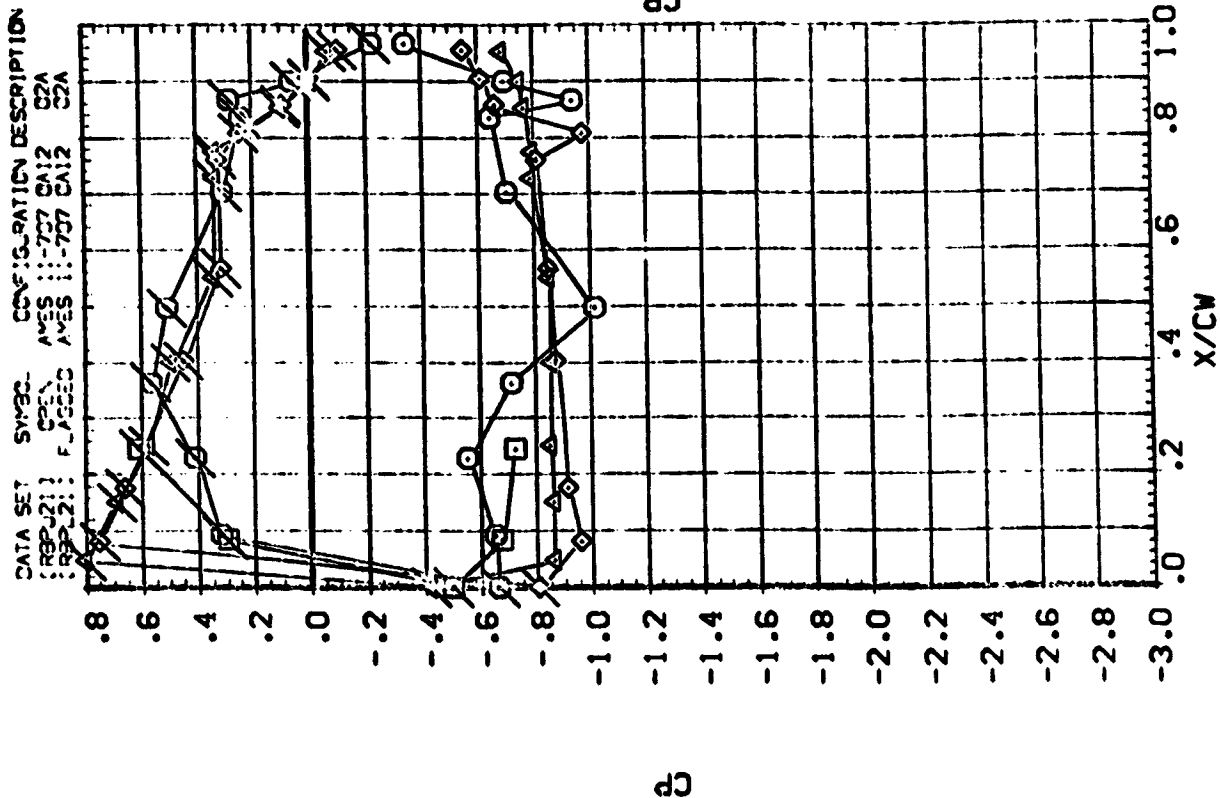


SYNCH Y/BN
 .299
 .364
 .427
 .534

BETA
 -10.00
 .080

MACH
 .902

PARAMETRIC VALUES
 ALPHA
 ELEVON
 20.000
 10.000
 RUDDER
 RUDDER

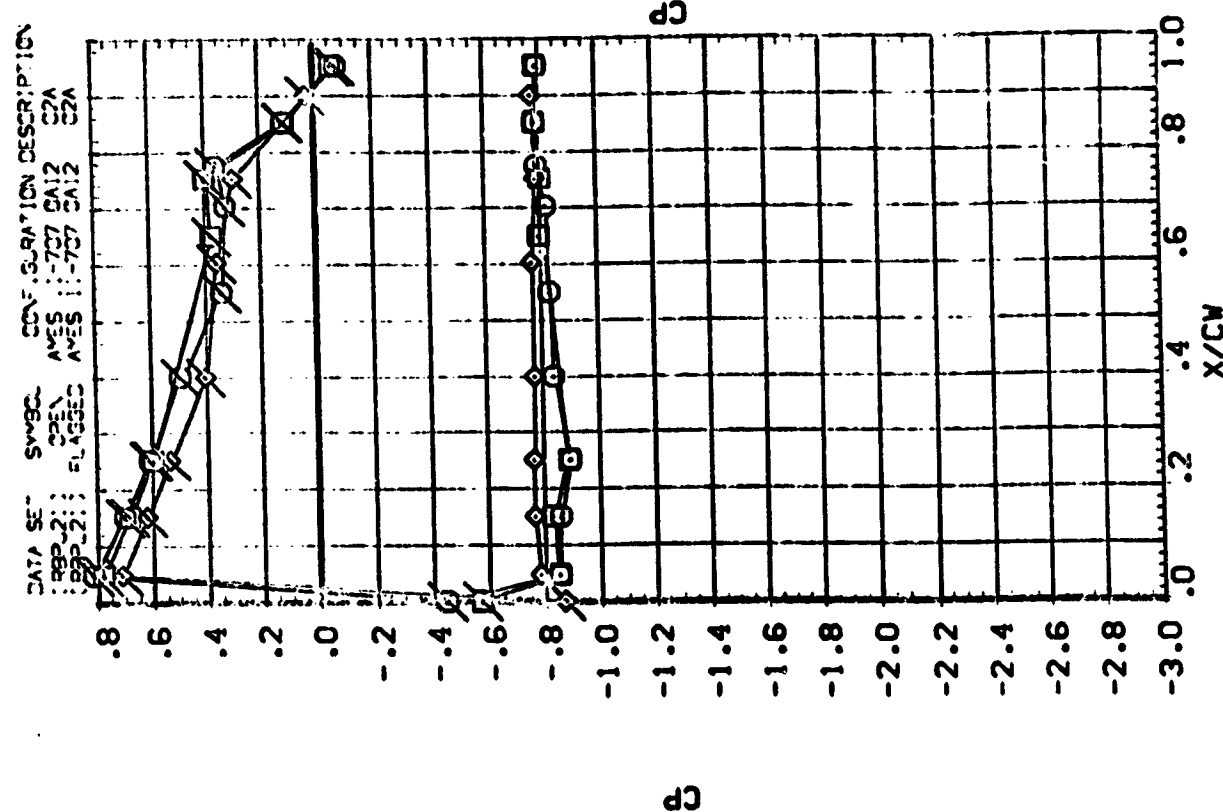
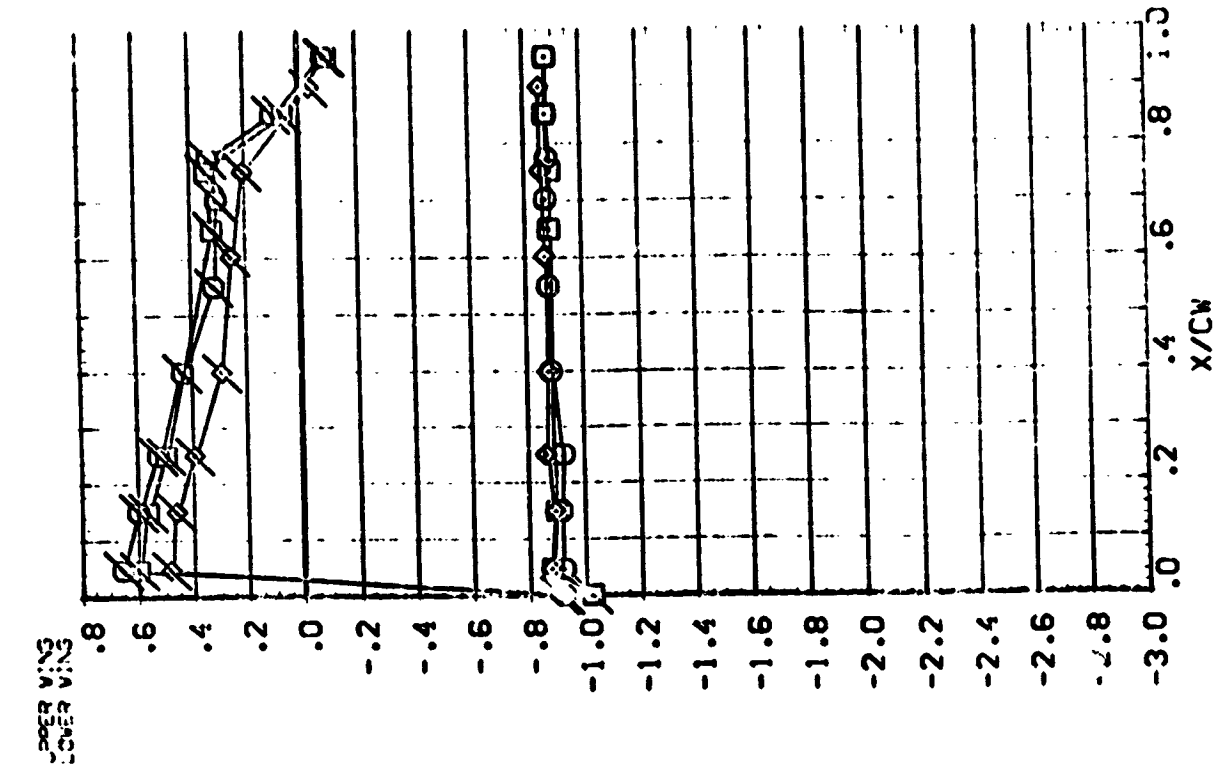


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 70.000 3.000
 70.000 3.000
 70.000 3.000

ALPHA
 ELEVATION

SWING Y/BA BE TA WACH
 .673 -10.100 .922
 .780 .080
 .887

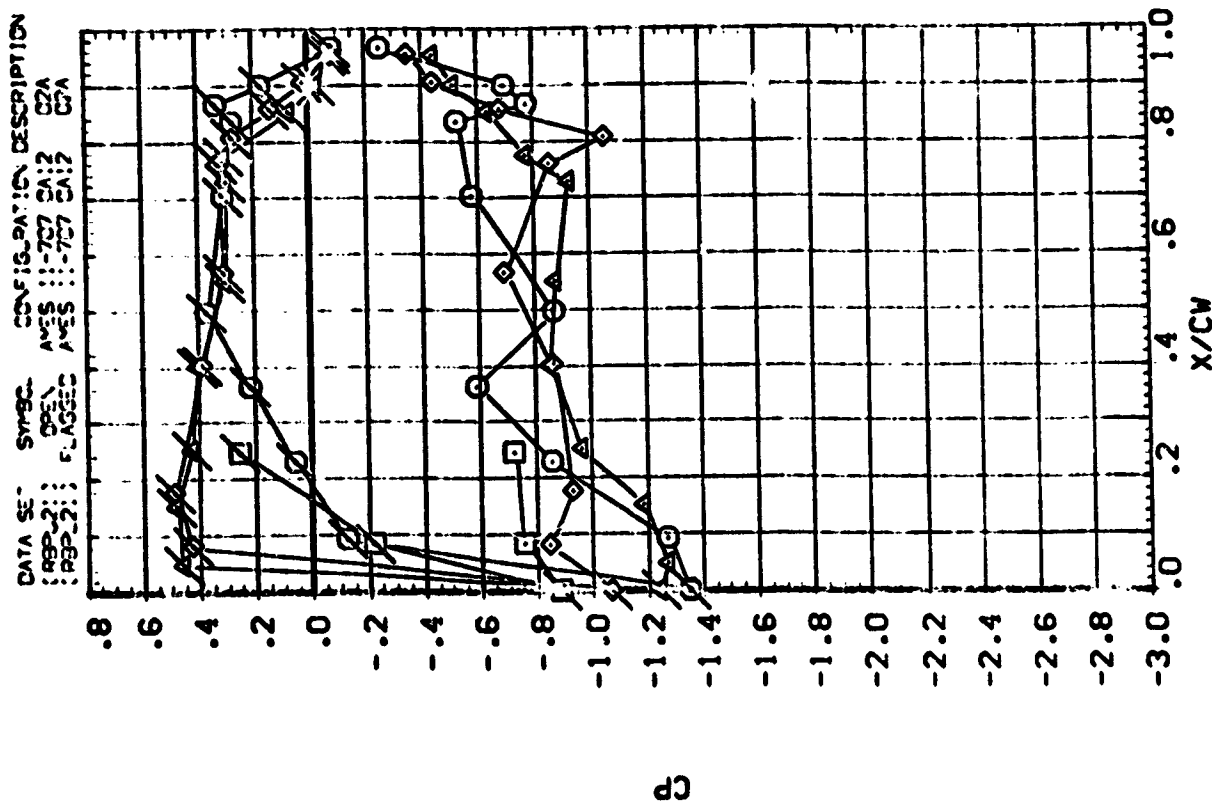


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

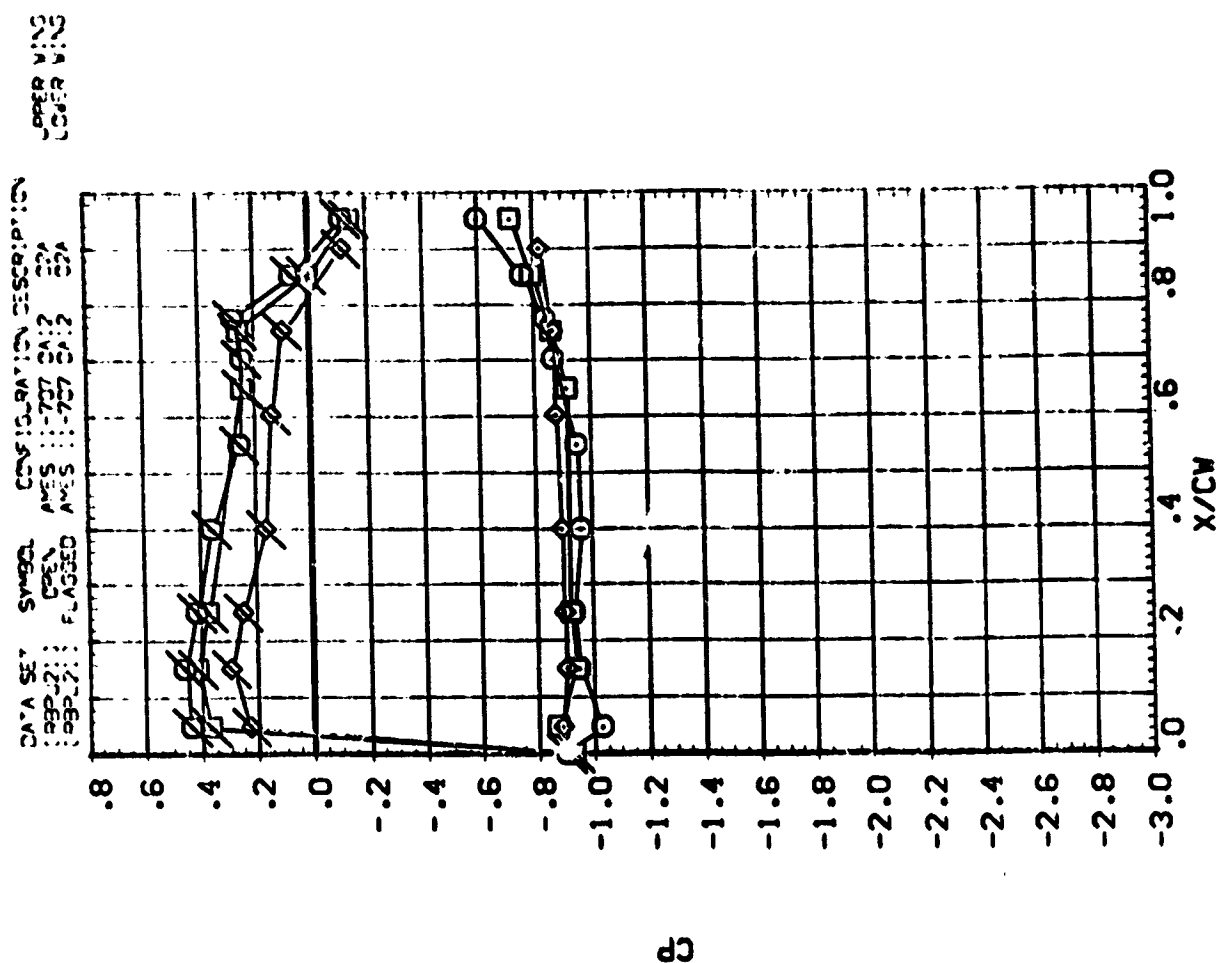
196

Symbol	V/BV	BETA	WAV
□	.299	10.420	.903
□	.364		
◇	.477		
△	.534		

LOVER 11:25
LOVER 11:25



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES



SYMBOL V/BV

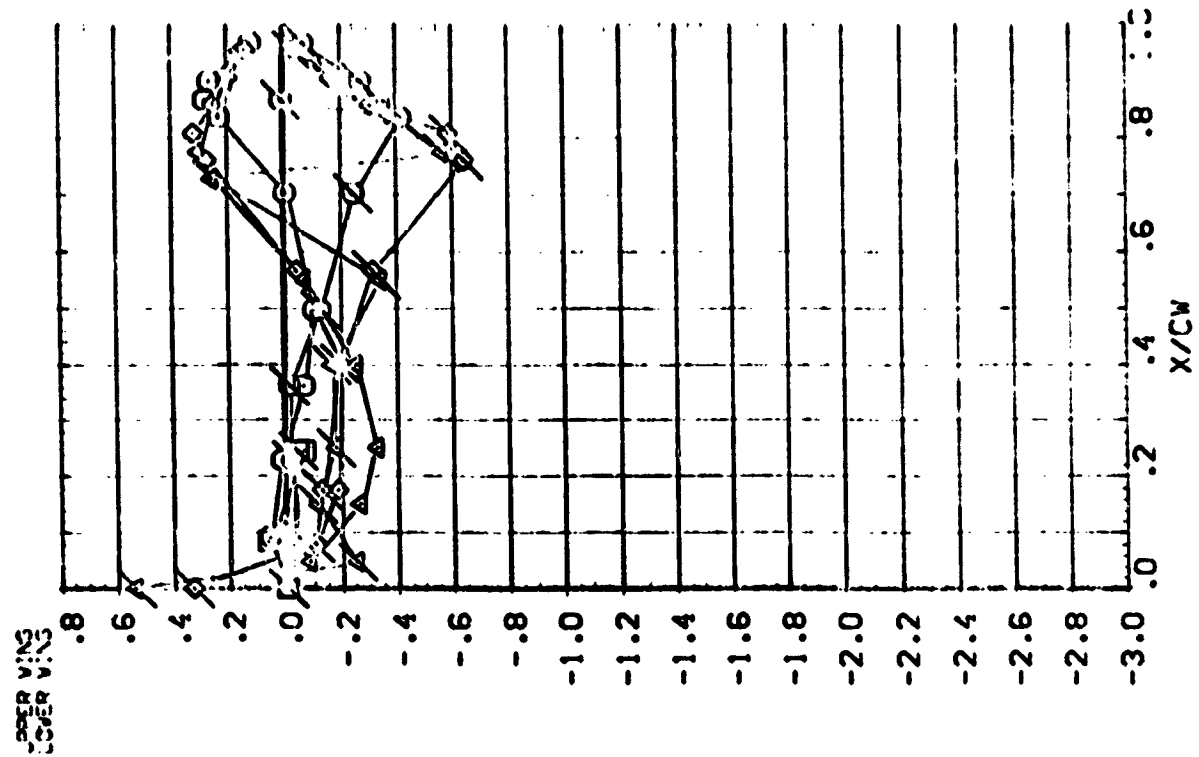
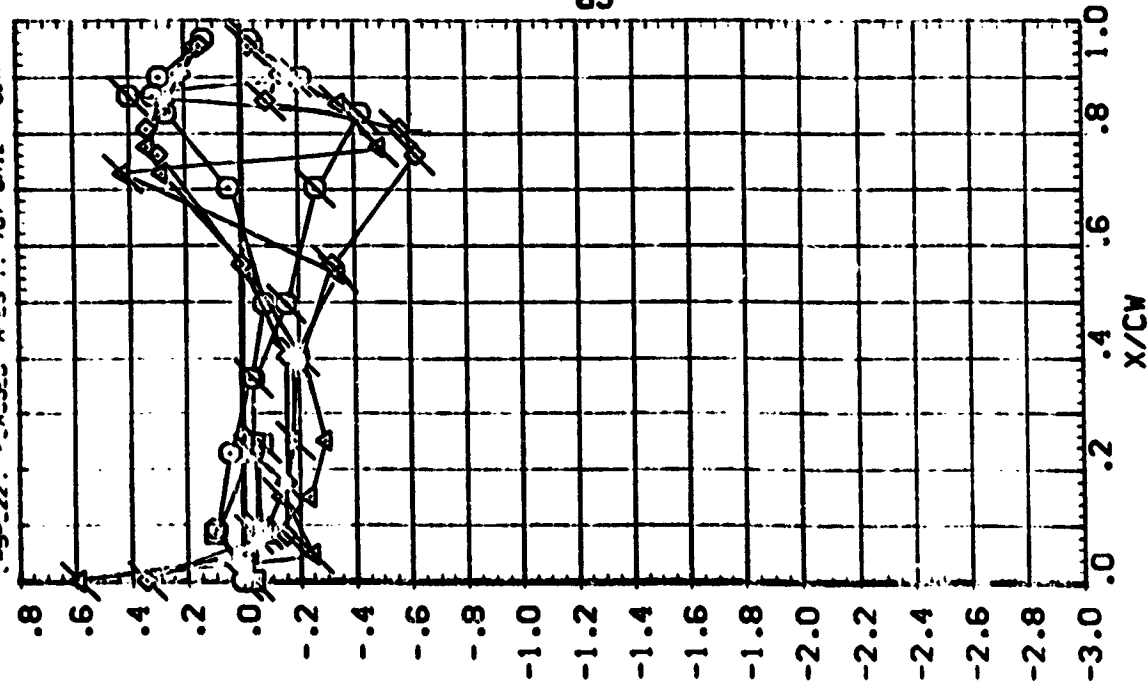
.259
.364
.427
.534

BETA
-7.97C
-3.94C

WACH
.558

PARAMETER VALUES
ALPHA
ELEVON
-10.000
-0.000
-0.000

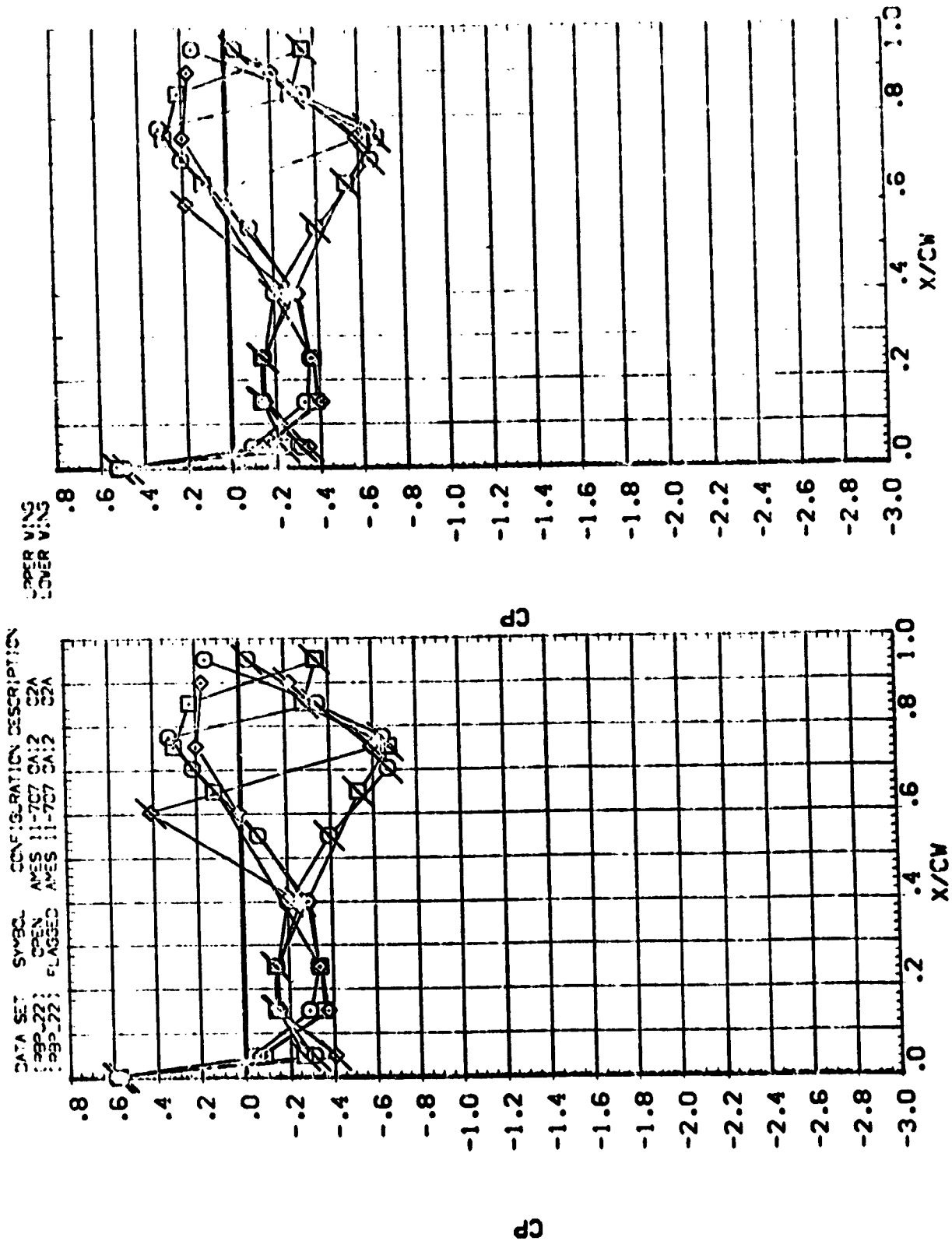
DATA SET: SYMBO-
:99-22: OPEN AMES 11-707 GA12 C2A
:99-22: CLOSED AMES 11-707 GA12 C2A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

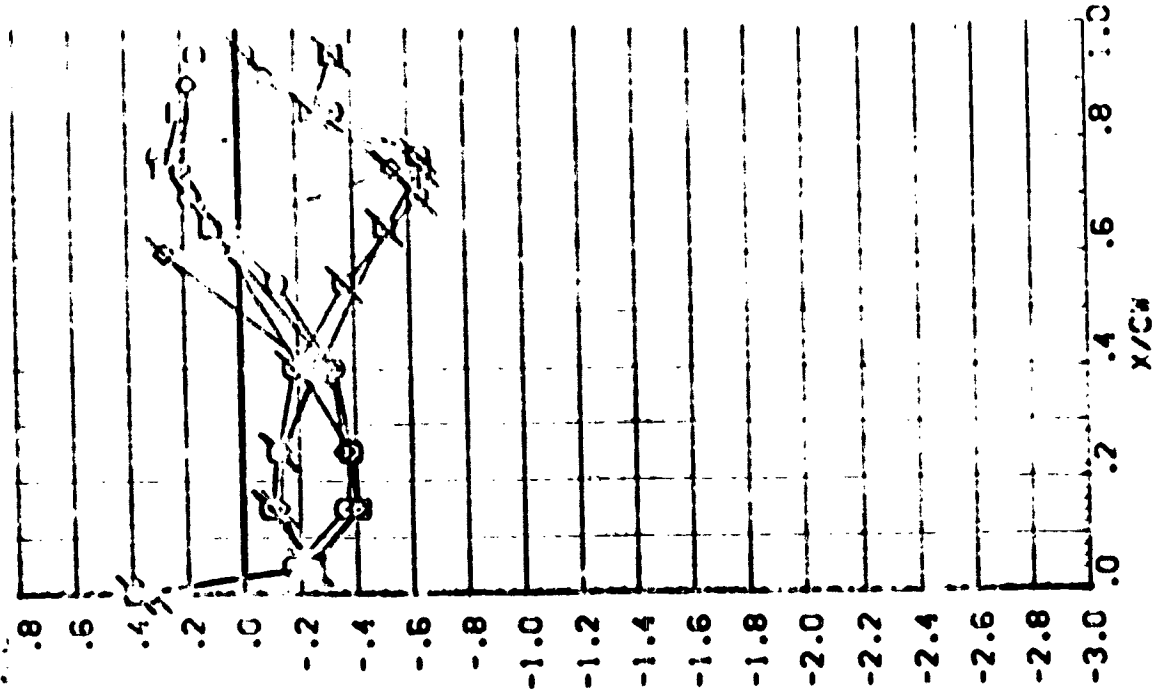
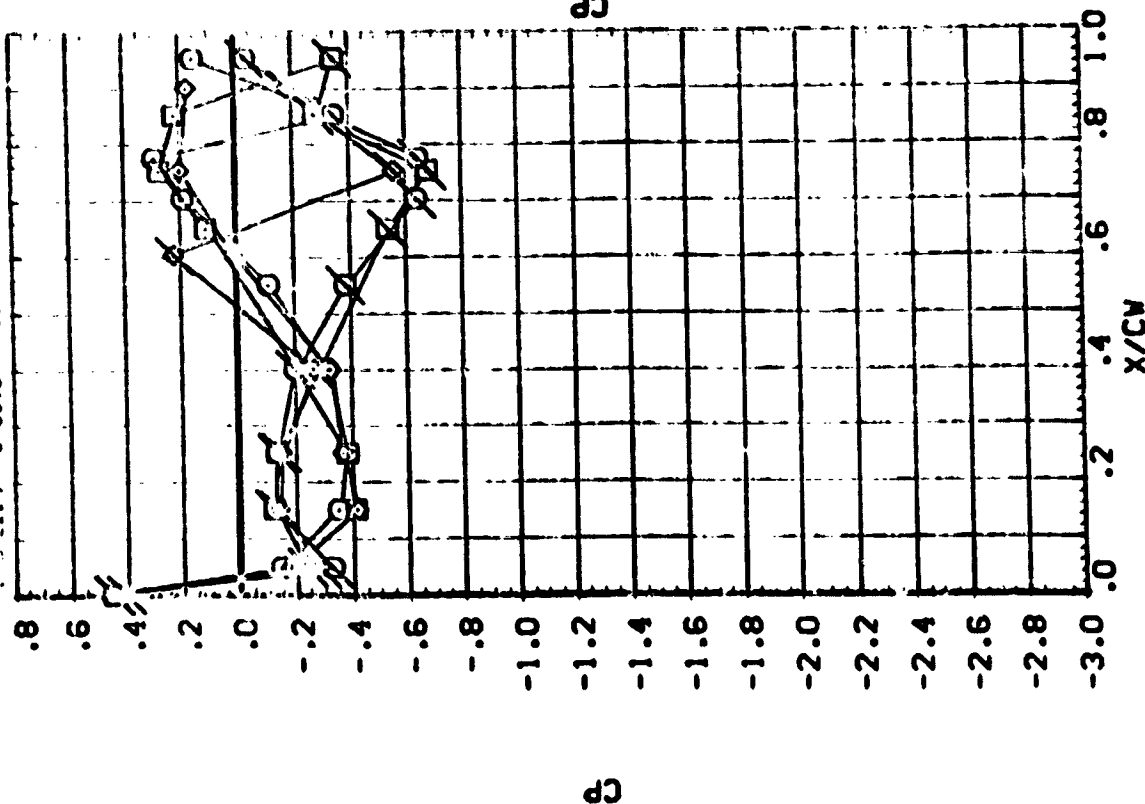
DATA SET: 11-707
 CONFIGURATION: CA:2
 ALPHA: 0.0
 BETA: 0.0
 MACH: 0.598

DATA SET: 11-707
 CONFIGURATION: CA:2
 ALPHA: 0.0
 BETA: 0.0
 MACH: 0.598



5-130 100% 2.7% 100% 1.58
 100% 100% 100% 100%
 100% 100% 100% 100%

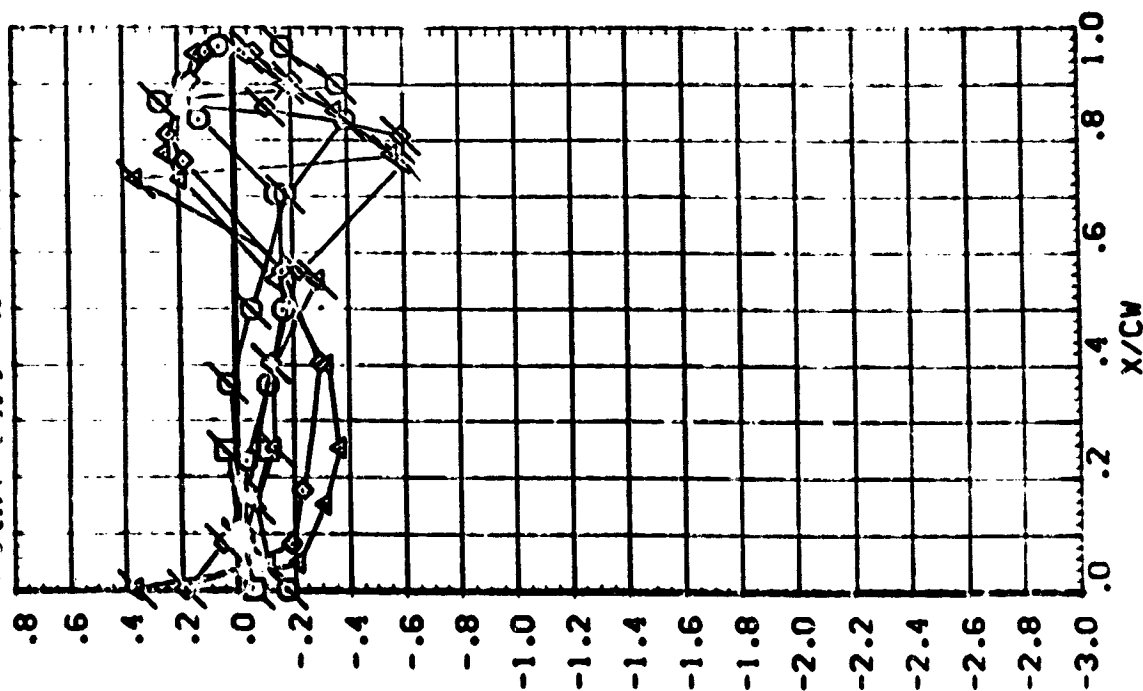
DATA SET 5-130-1
 100% 100% 100% 100%
 100% 100% 100% 100%
 100% 100% 100% 100%



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

SECRET

22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218
219
220
221
222
223
224
225
226
227
228
229
230
231
232
233
234
235
236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280
281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298
299
300
301
302
303
304
305
306
307
308
309
310
311
312
313
314
315
316
317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
344
345
346
347
348
349
350
351
352
353
354
355
356
357
358
359
360
361
362
363
364
365
366
367
368
369
370
371
372
373
374
375
376
377
378
379
380
381
382
383
384
385
386
387
388
389
390
391
392
393
394
395
396
397
398
399
400
401
402
403
404
405
406
407
408
409
410
411
412
413
414
415
416
417
418
419
420
421
422
423
424
425
426
427
428
429
430
431
432
433
434
435
436
437
438
439
440
441
442
443
444
445
446
447
448
449
450
451
452
453
454
455
456
457
458
459
460
461
462
463
464
465
466
467
468
469
470
471
472
473
474
475
476
477
478
479
480
481
482
483
484
485
486
487
488
489
490
491
492
493
494
495
496
497
498
499
500
501
502
503
504
505
506
507
508
509
510
511
512
513
514
515
516
517
518
519
520
521
522
523
524
525
526
527
528
529
530
531
532
533
534
535
536
537
538
539
540
541
542
543
544
545
546
547
548
549
550
551
552
553
554
555
556
557
558
559
560
561
562
563
564
565
566
567
568
569
570
571
572
573
574
575
576
577
578
579
580
581
582
583
584
585
586
587
588
589
590
591
592
593
594
595
596
597
598
599
600
601
602
603
604
605
606
607
608
609
610
611
612
613
614
615
616
617
618
619
620
621
622
623
624
625
626
627
628
629
630
631
632
633
634
635
636
637
638
639
640
641
642
643
644
645
646
647
648
649
650
651
652
653
654
655
656
657
658
659
660
661
662
663
664
665
666
667
668
669
670
671
672
673
674
675
676
677
678
679
680
681
682
683
684
685
686
687
688
689
690
691
692
693
694
695
696
697
698
699
700
701
702
703
704
705
706
707
708
709
710
711
712
713
714
715
716
717
718
719
720
721
722
723
724
725
726
727
728
729
730
731
732
733
734
735
736
737
738
739
740
741
742
743
744
745
746
747
748
749
750
751
752
753
754
755
756
757
758
759
760
761
762
763
764
765
766
767
768
769
770
771
772
773
774
775
776
777
778
779
780
781
782
783
784
785
786
787
788
789
790
791
792
793
794
795
796
797
798
799
800
801
802
803
804
805
806
807
808
809
810
811
812
813
814
815
816
817
818
819
820
821
822
823
824
825
826
827
828
829
830
831
832
833
834
835
836
837
838
839
840
841
842
843
844
845
846
847
848
849
850
851
852
853
854
855
85

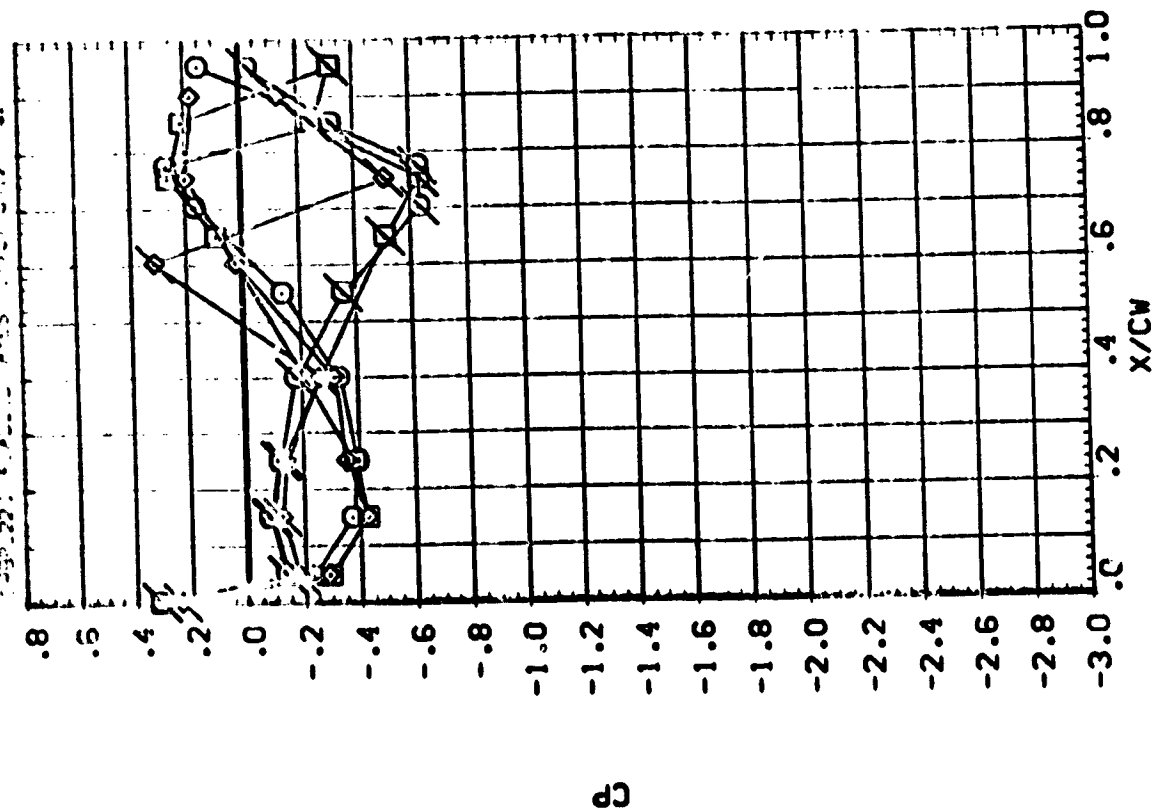


CHRONWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETERS
 A.P.H.A.
 ELEVATION

DATA SET: SYMBO
 CONVOLUTION DESIGN
 198-221
 198-222
 198-223

DATA SET: SYMBO
 CONVOLUTION DESIGN
 198-221
 198-222
 198-223



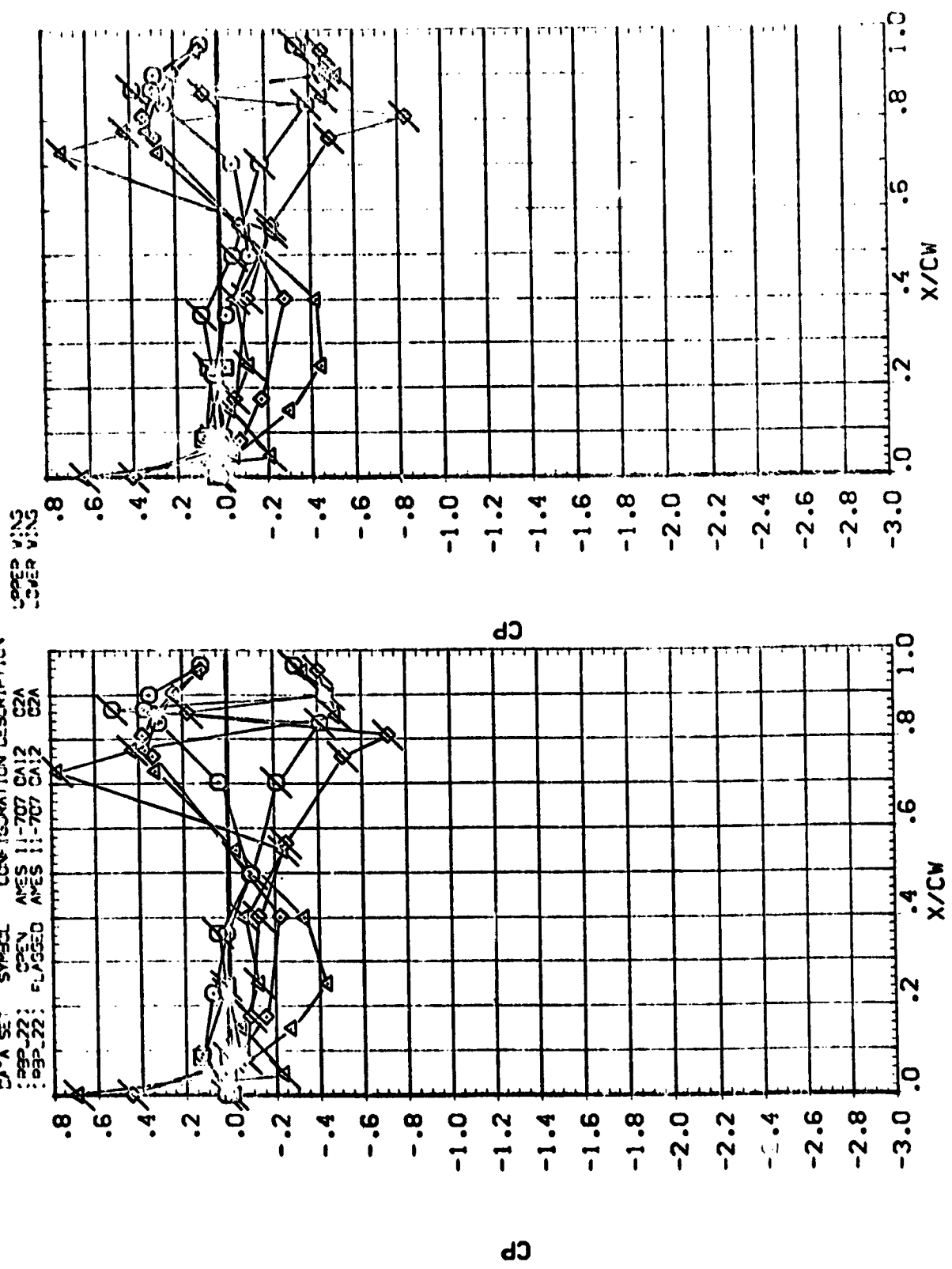
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

SYMBOL
 □
 ◇
 △

Y/BV BETA MACH
 .299 -8.080 .904
 .364 -4.000
 .427
 .534

ALPHA
 ELEVON
 -10.000 2.000
 -10.000 2.000
 -10.000 2.000

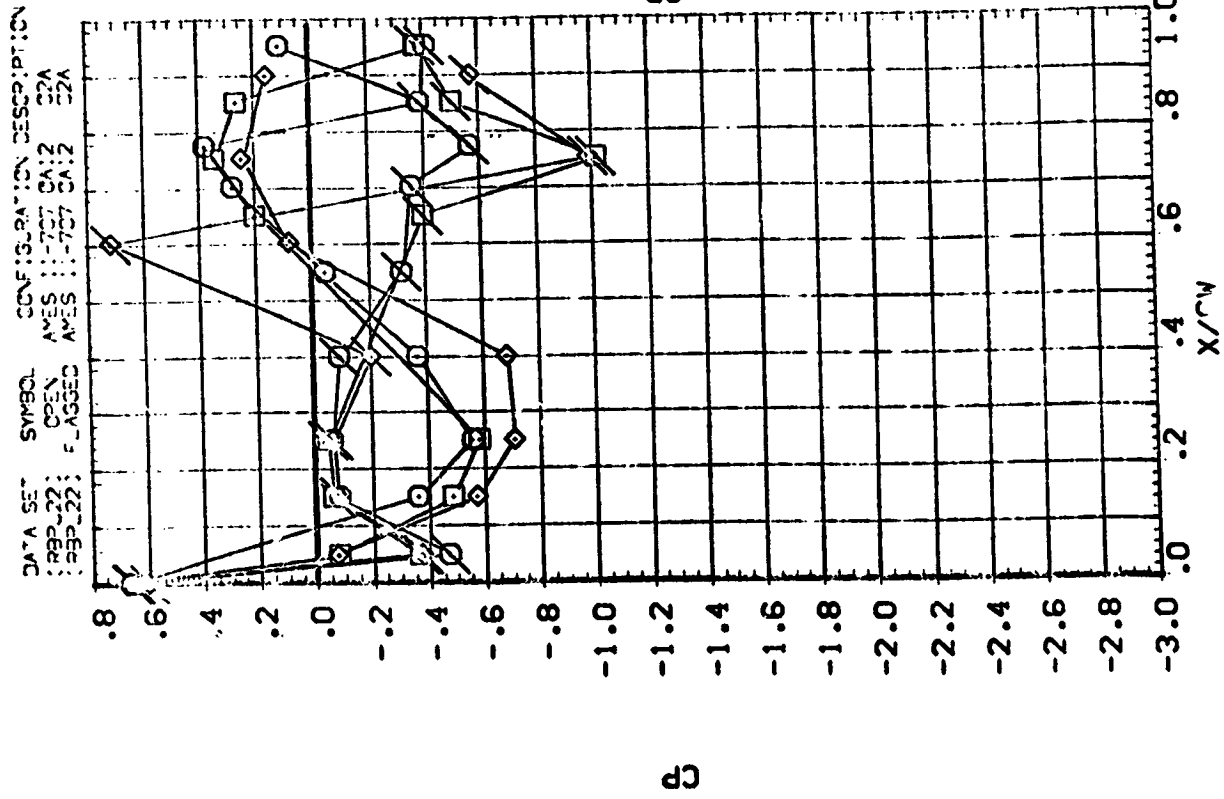
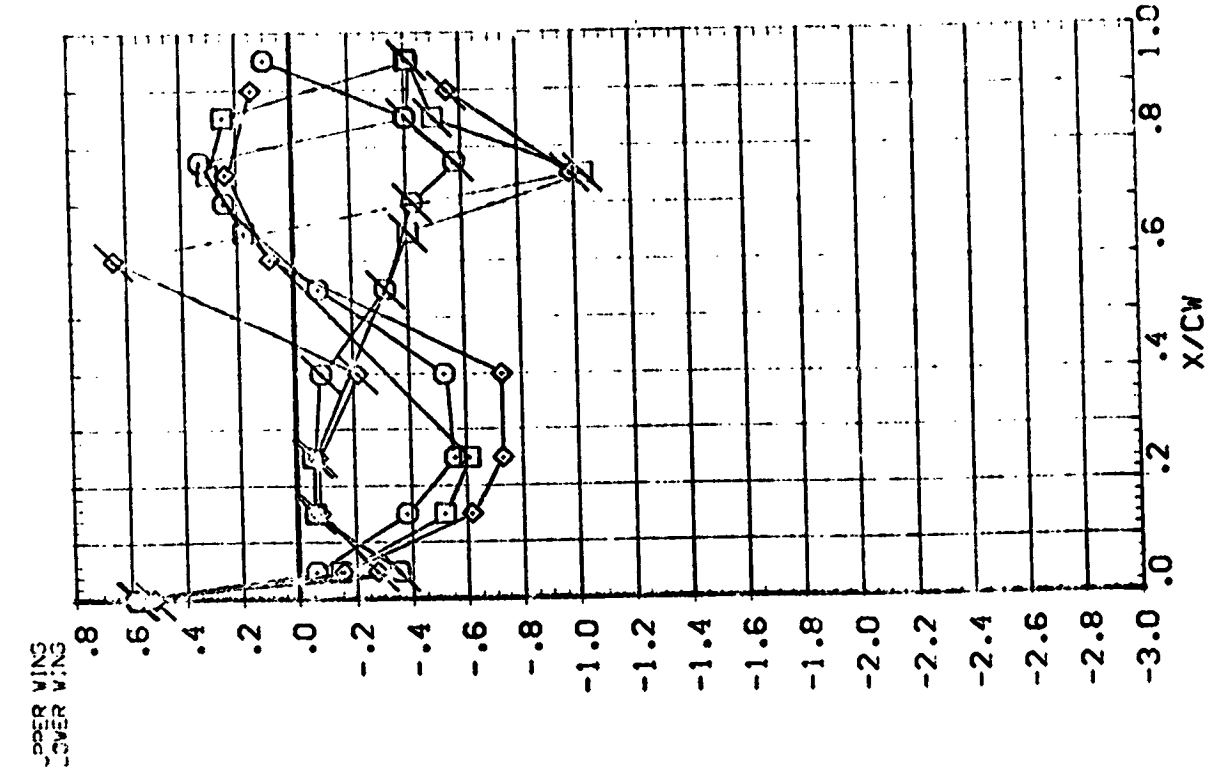
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 : 93P-22 OPEN AMES 11-707 CA12 C2A
 : 93P-22 FLASSED AMES 11-707 CA12 C2A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

SIGMA: 0.015
 ALPHA: 0.000
 ELEV: 0.000

UPPER WING
 LOWER WING



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

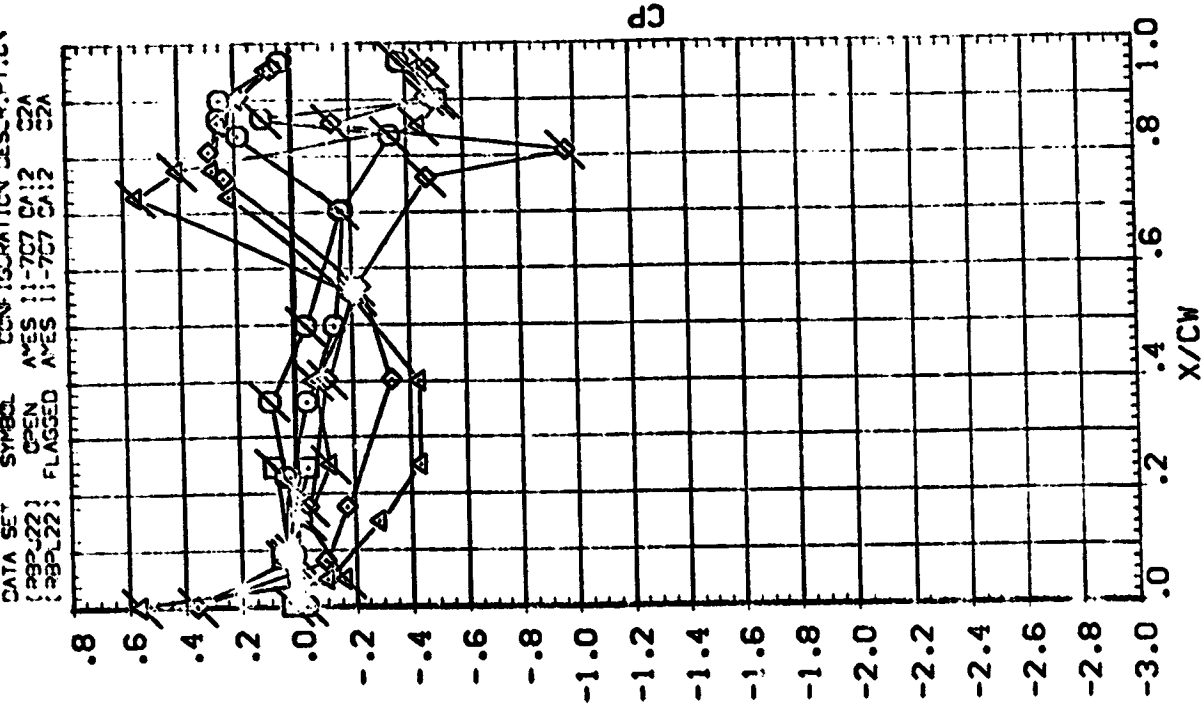
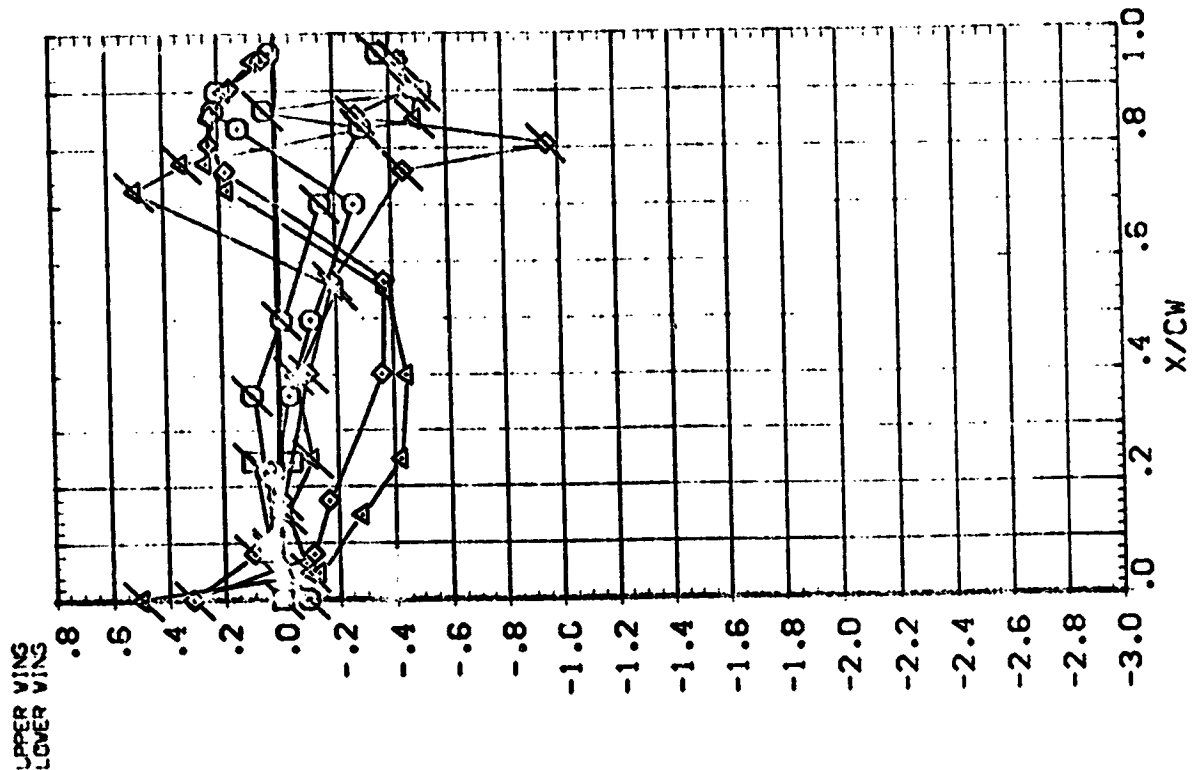


SYMBOL
○ □ ◇ △

Y/BV BETA MACH
.299 .080 .904
.364 4.250
.427
.534

PARAMETRIC VALUES
ALPHA RUDER
ELEVON -10.000 RUDER
 .000 .000

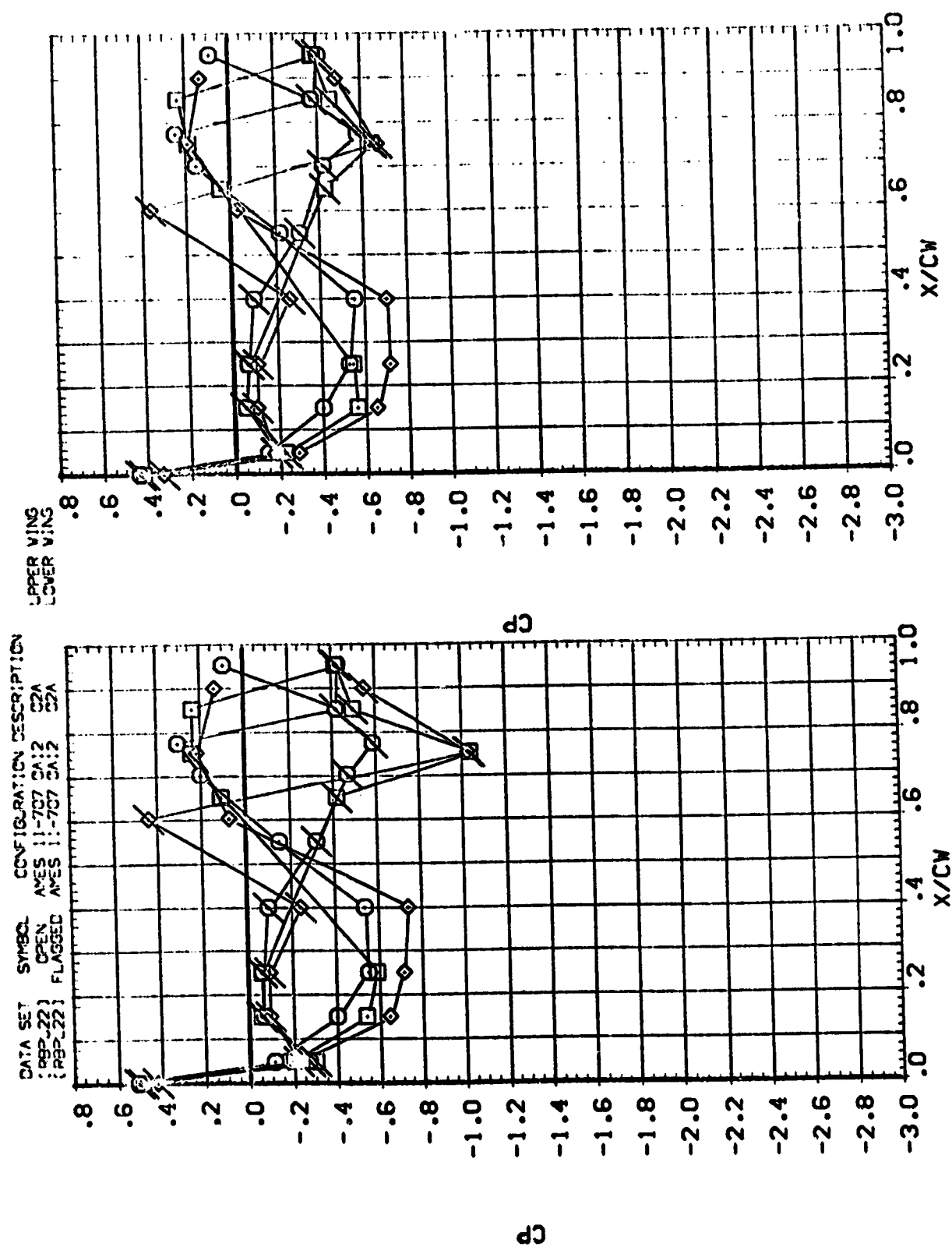
DATA SET SYMBOL CONFIGURATION DESCRIPTION
(PBPJ22) OPEN ASES 11-707 CA12 C2A
(PBPJ22) FLAGGED ASES 11-707 CA12 C2A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA .000
 ELEVON -10.000
 RUDER .000
 RUDDER .000

SYMBOL V/BV BETA MACH
 .573 .080 .904
 .780 4.250
 .887



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

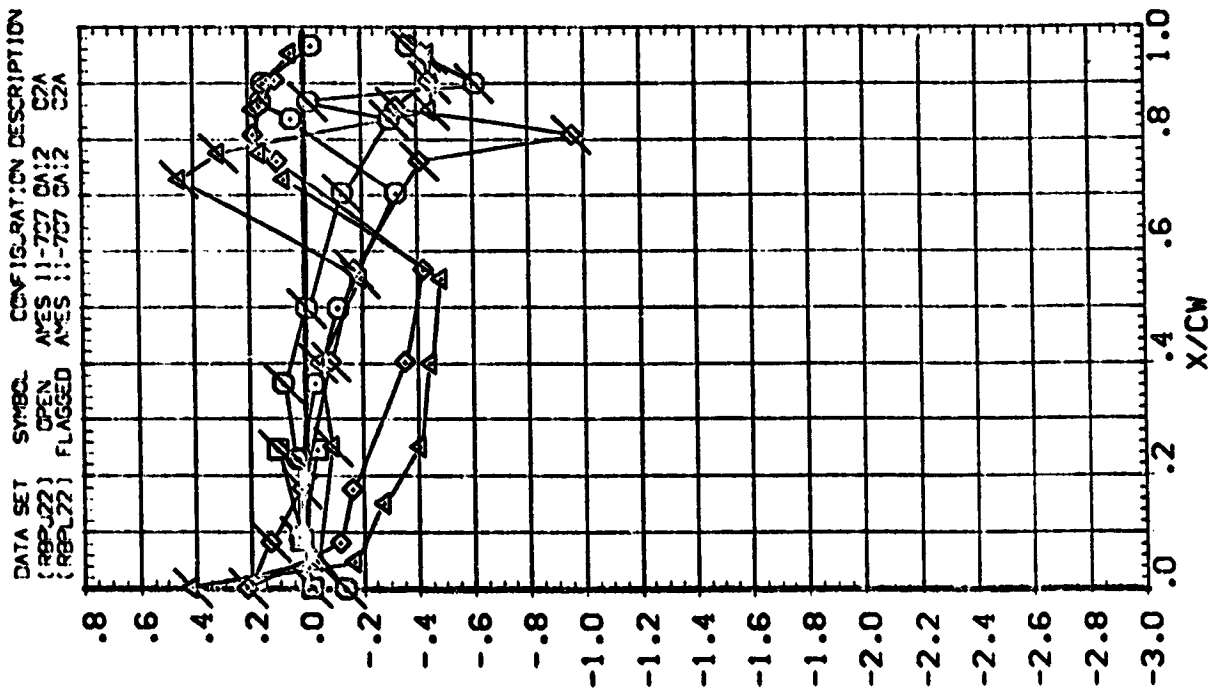


SYMBOL Y/BV
□ .799
○ .364
◇ .477
△ .534

BETA 8.410
MACH .904

PARAMETRIC VALUES
ALPHA .000
ELEVON -10.000
RUDDER .000
RUJFLR .000

UPPER WING
LOWER WING

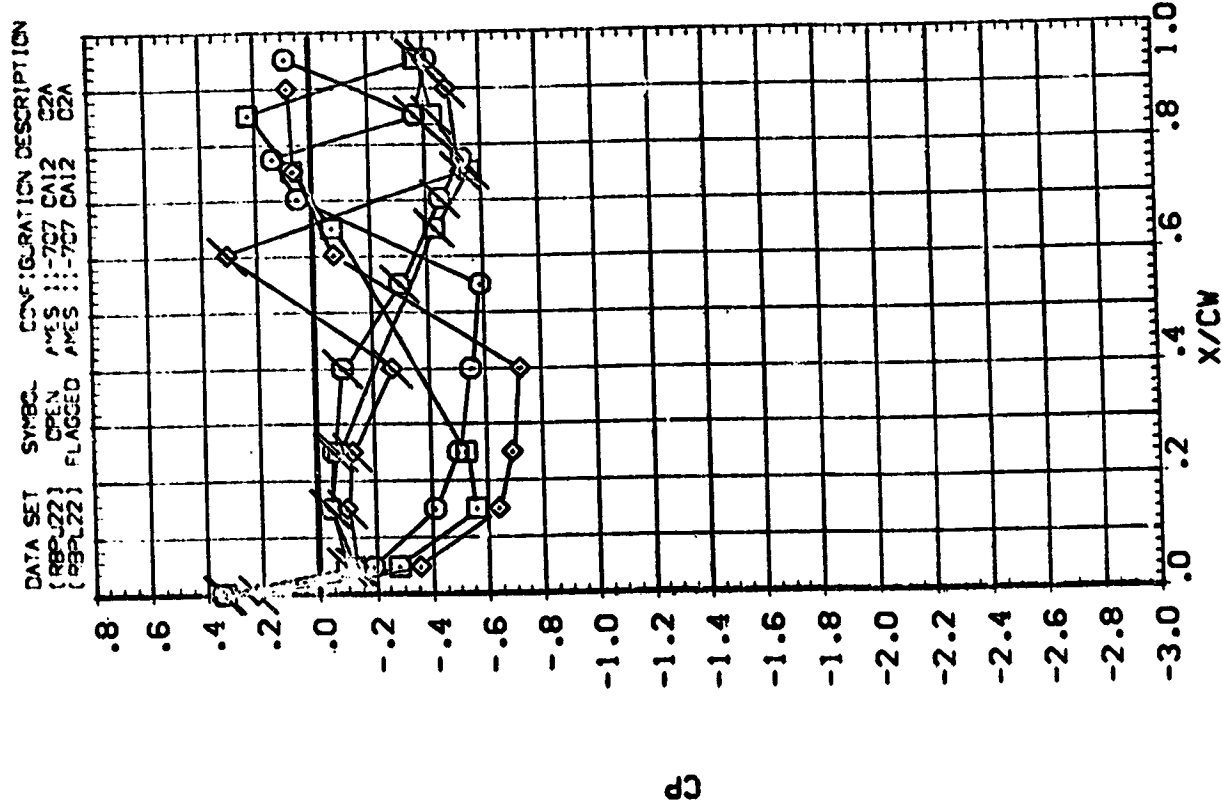


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA .000
 ELEVON .000
 RUDDER .000
 RUPTER .000

SYMBOL Y/BV BETA MACH
 .673 8.410 .904
 .780
 .887

UPPER WING
 LOWER WING

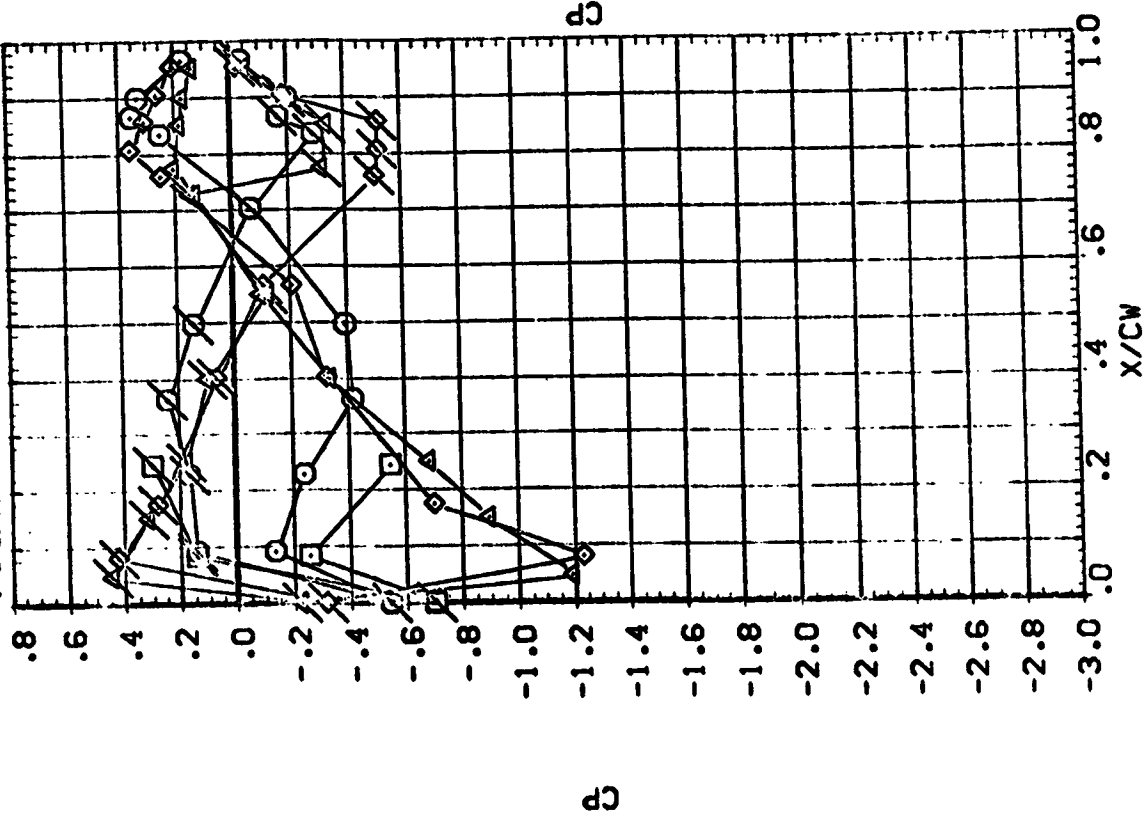


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

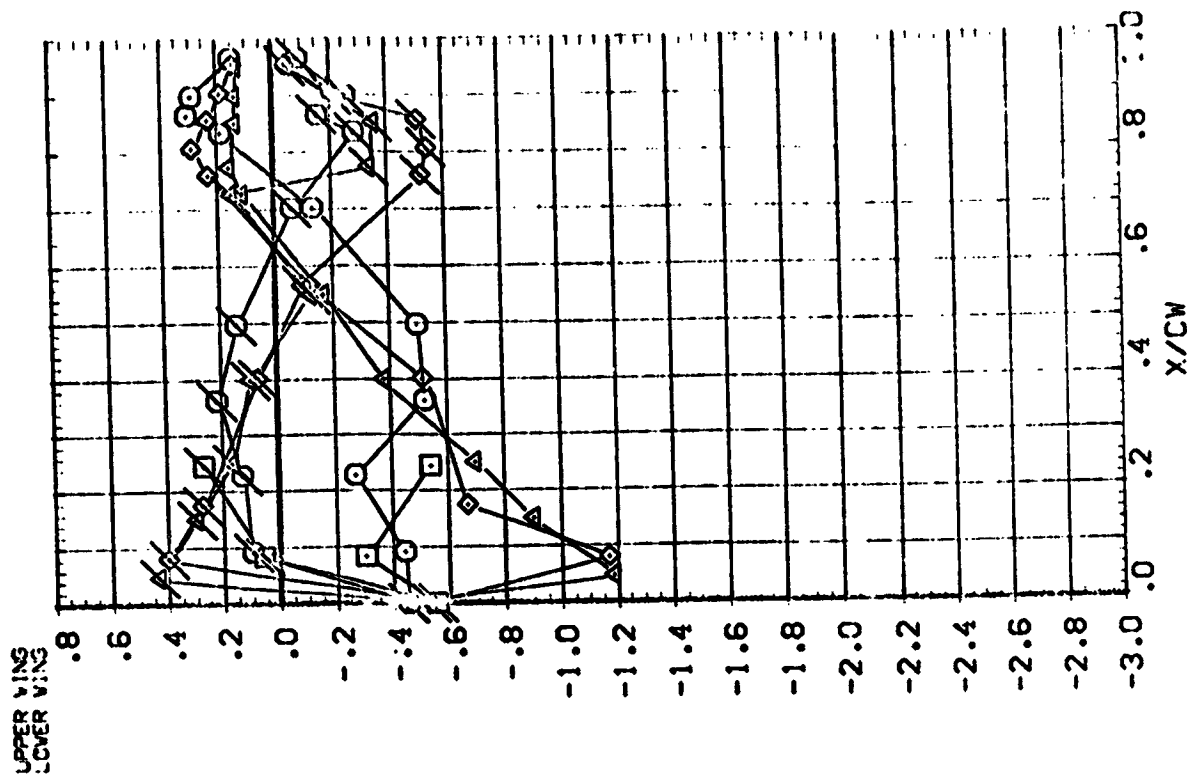


SYMBOL Y/BV BETA WACH
 ○ .299 -8.080 .597
 □ .364 -3.990
 ◇ .427
 △ .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RBP-24) OPEN APES 11-707 OA12 OA2A
 (RBP-24) FLAGGED APES 11-707 OA12 OA2A



PARAMETRIC VALUES
 ALPHA 10.000 RUMER
 ELEVON -10.000 RUMER



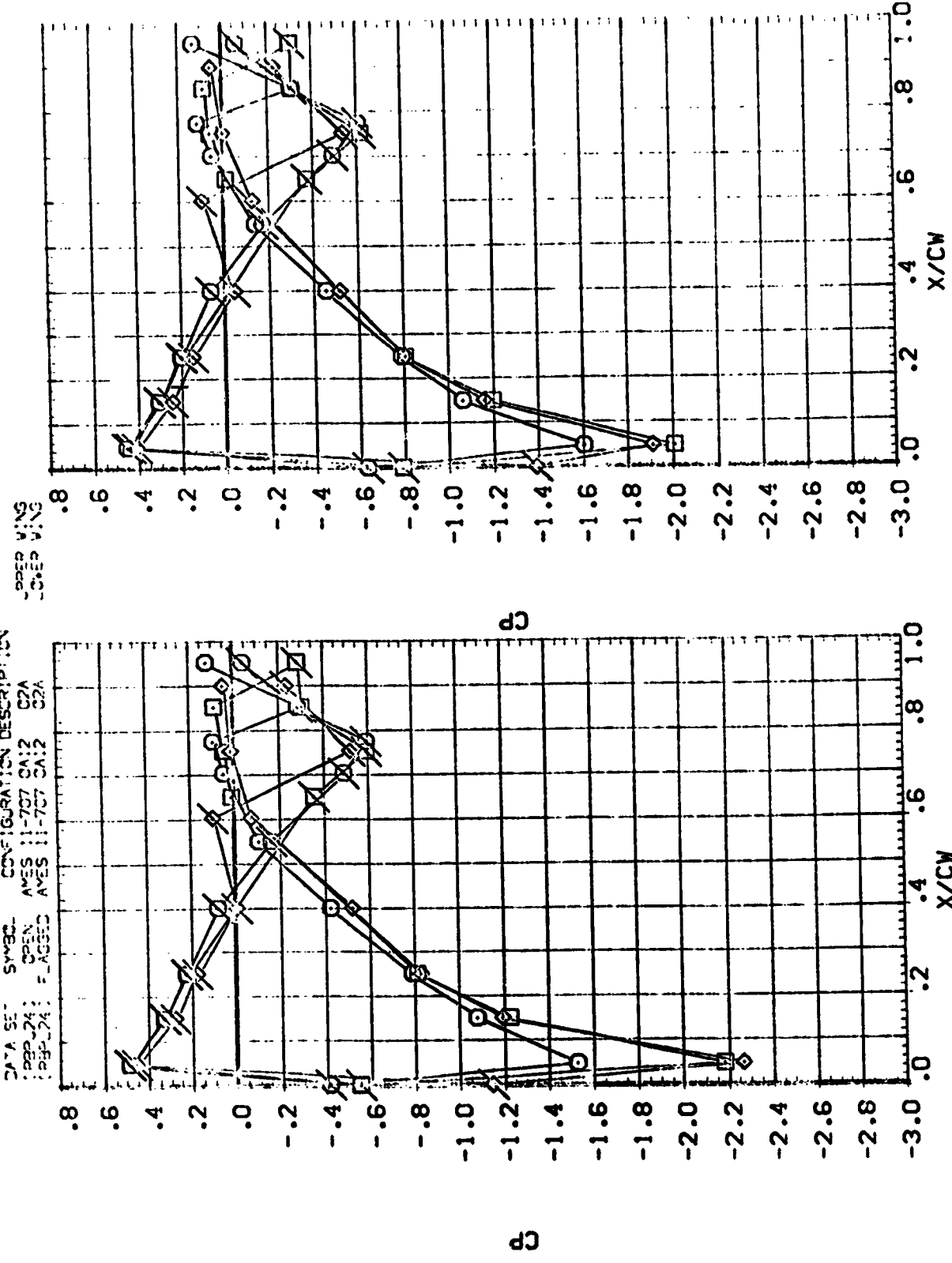
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA 10.000
 ELEVON -10.000

ALPHA
 ELEVON

SYMBOL
 1/3
 .673
 .78C
 .827
 BETA
 -8.05C
 -3.99C
 WACH
 .597

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 182-24: OPEN AVES 11-707 CA12 C2A
 182-24: FLAGGED AVES 11-707 CA12 C2A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

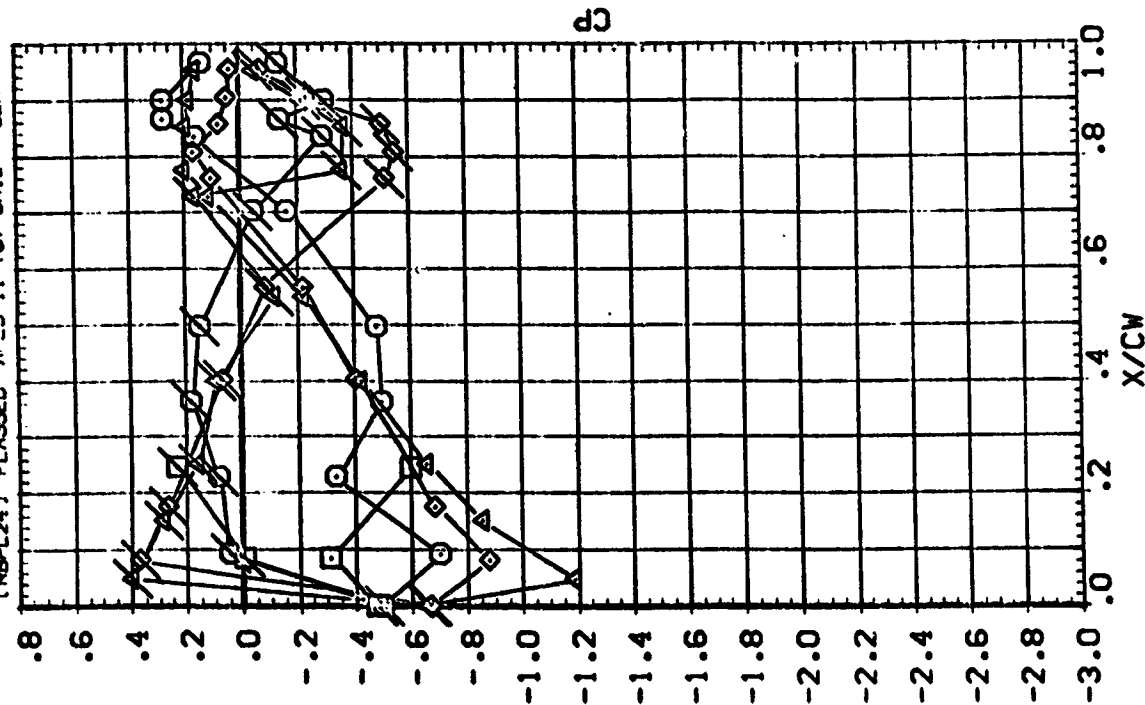
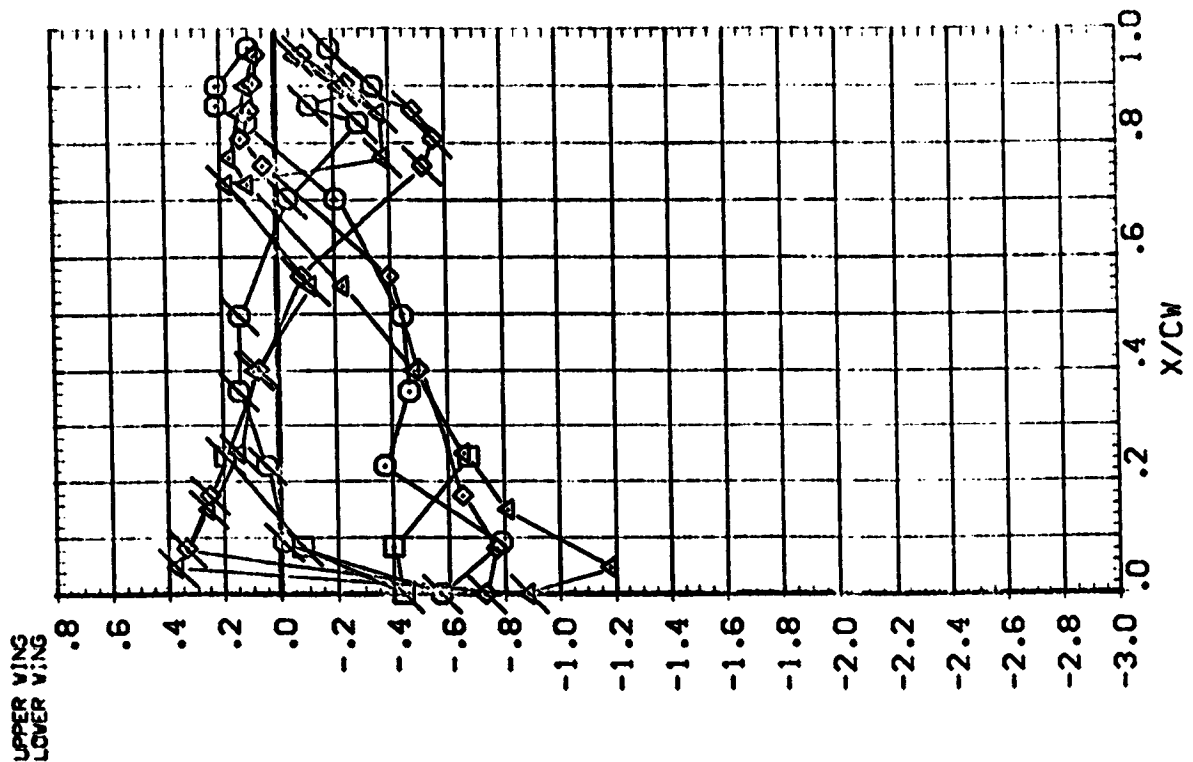


SYMBOL
 ○ □ ◇ △

Y/BW .299 .364 .427 .534
 BETA .080 4.150
 MACH .597

PARAMETRIC VALUES
 ALPHA 10.000 RUDER .000
 ELEVON -10.000 RUFLR .000

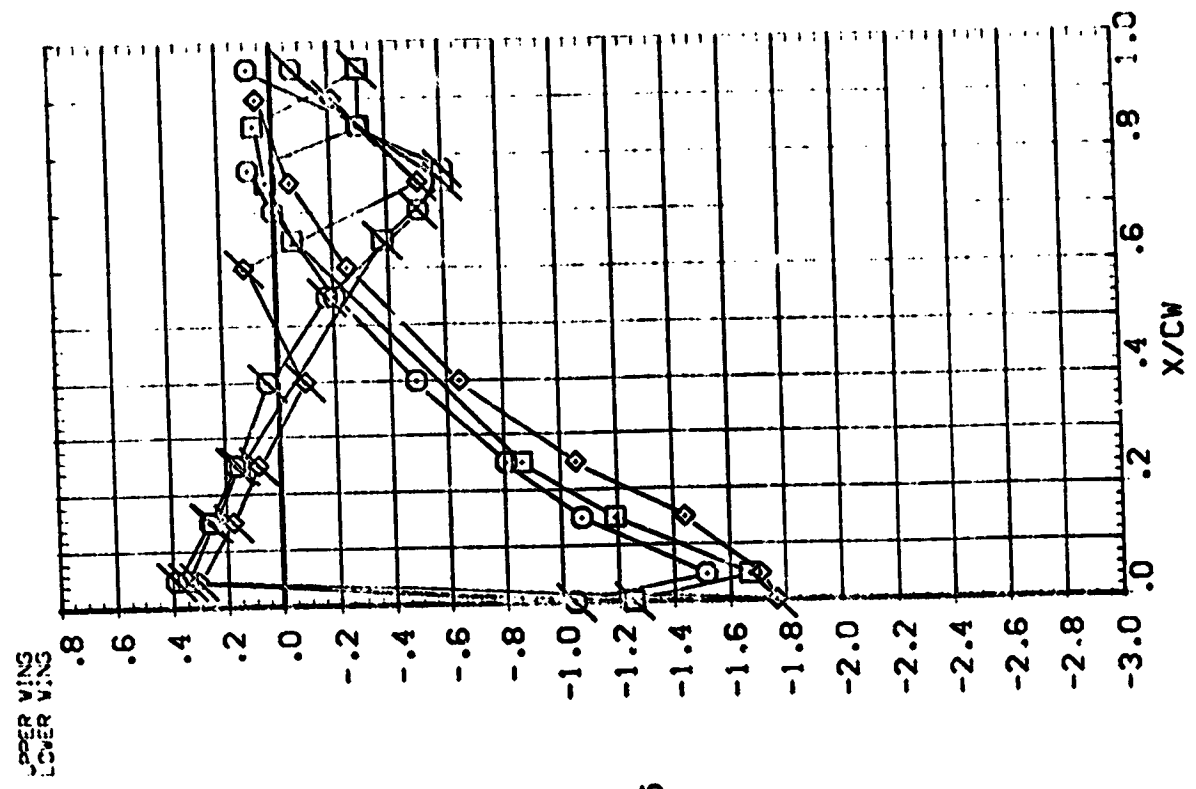
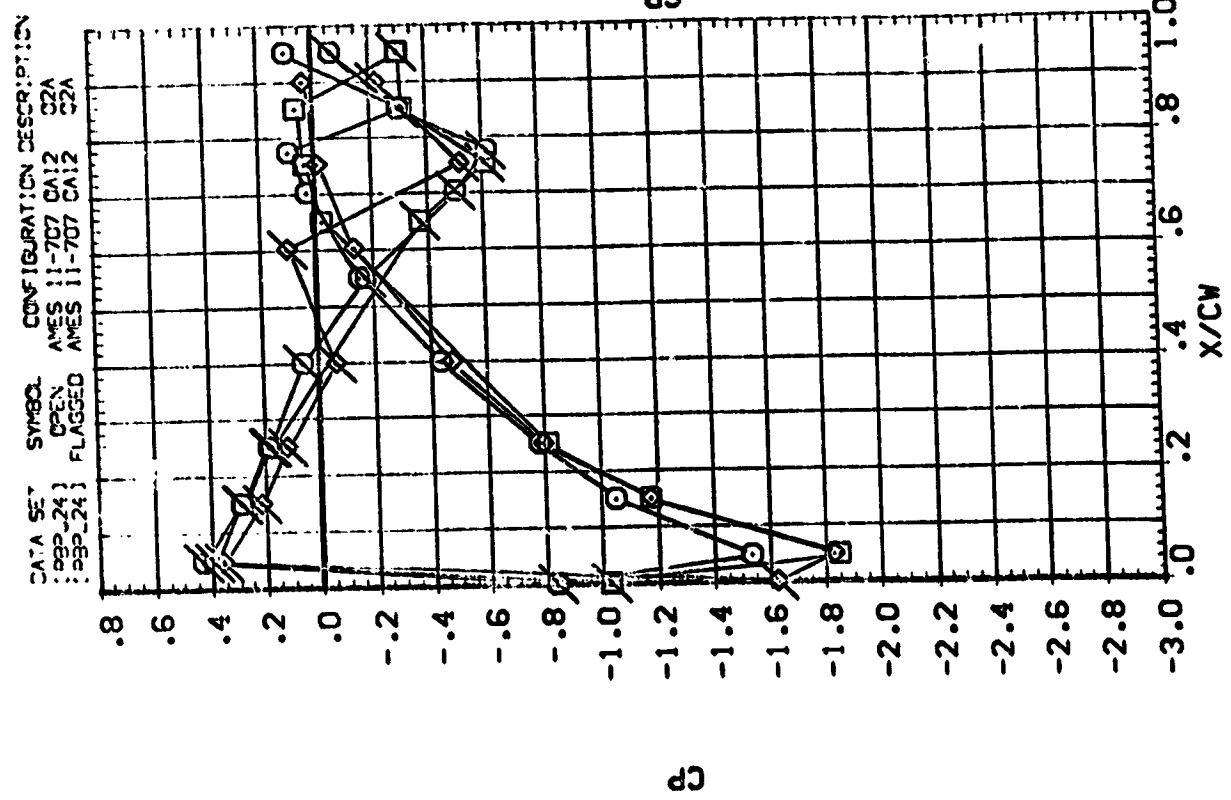
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RSPJ24) OPEN AXES 11-707 CA12 C2A
 (RSPJ24) FLAGGED AXES 11-707 CA12 C2A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA 10.000
 ELEVON 10.000
 RUDER 10.000
 RUDDER 10.000

SYNOPSIS
 Y/BV .573
 .78C
 .887
 BETA .08C
 4.15C
 MACH .597



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

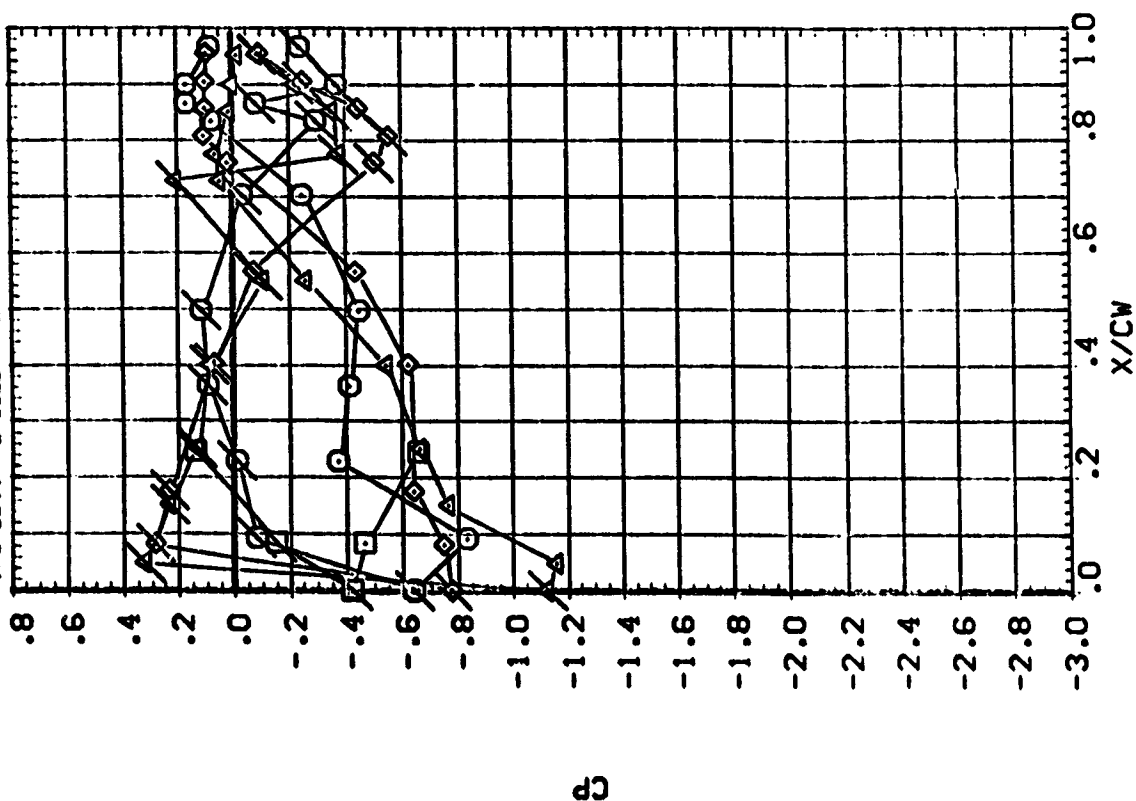


SYMBOL Y/BN BETA MACH
 ○ .299 8.230 .597
 □ .364
 ◇ .427
 △ .534

PARAMETRIC VALUES
 ALPHA 10.000 RUDER
 ELEVEN -10.000 RUDER

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RBP,24) OPEN AMES 11-707 DA12 D2A
 (RBP,24) FLAGGED AMES 11-707 DA12 C2A

UPPER WING
 LOWER WING



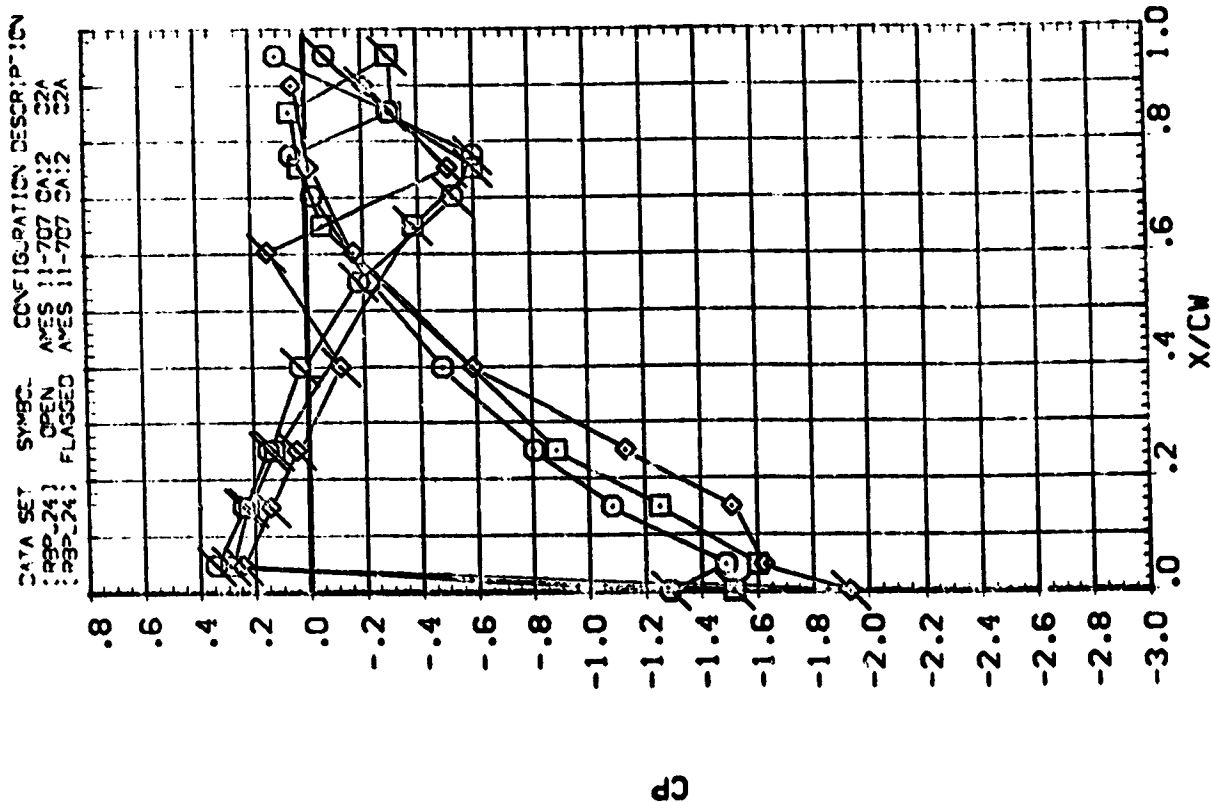
PARAMETER VALUES

ALPHA	10.000	5.000	10.000
ELEV	10.000	5.000	10.000

SWING V/3M BETA MACH

SWING	V/3M	BETA	MACH
0.10	.573	8.230	.597
0.10	.780		
0.10	.987		

UPPER WING
LOWER WING



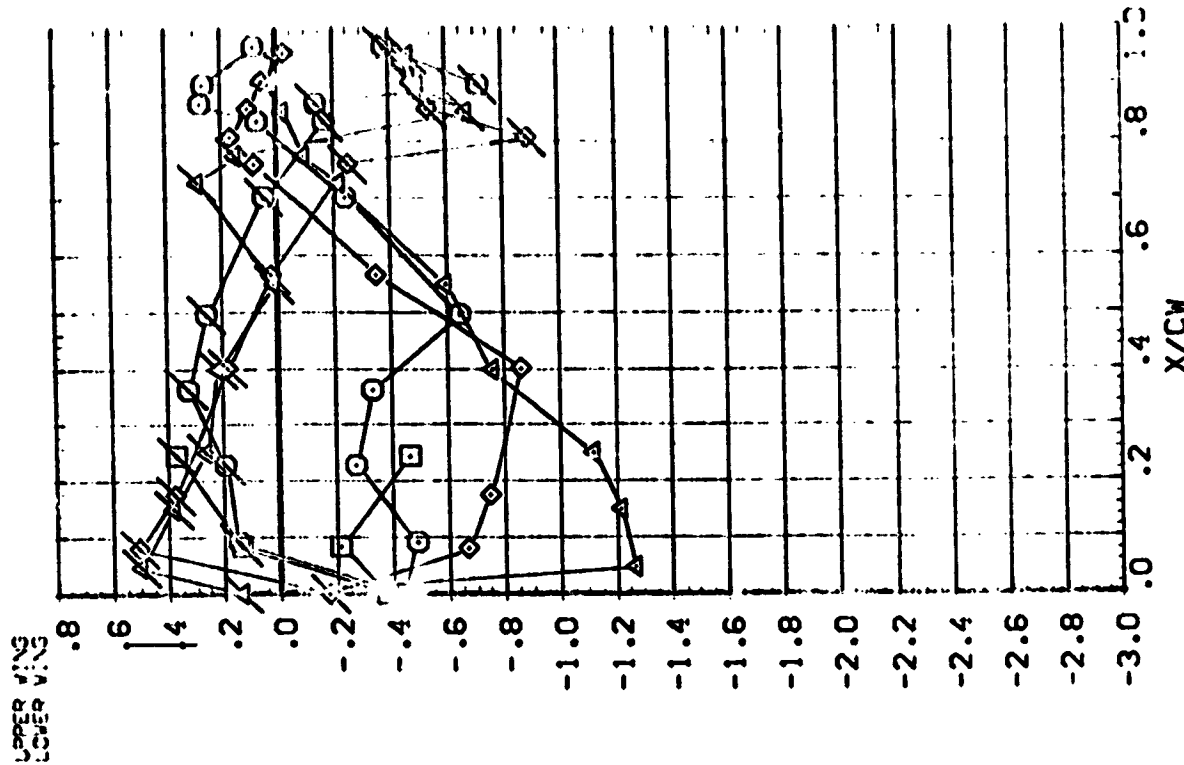
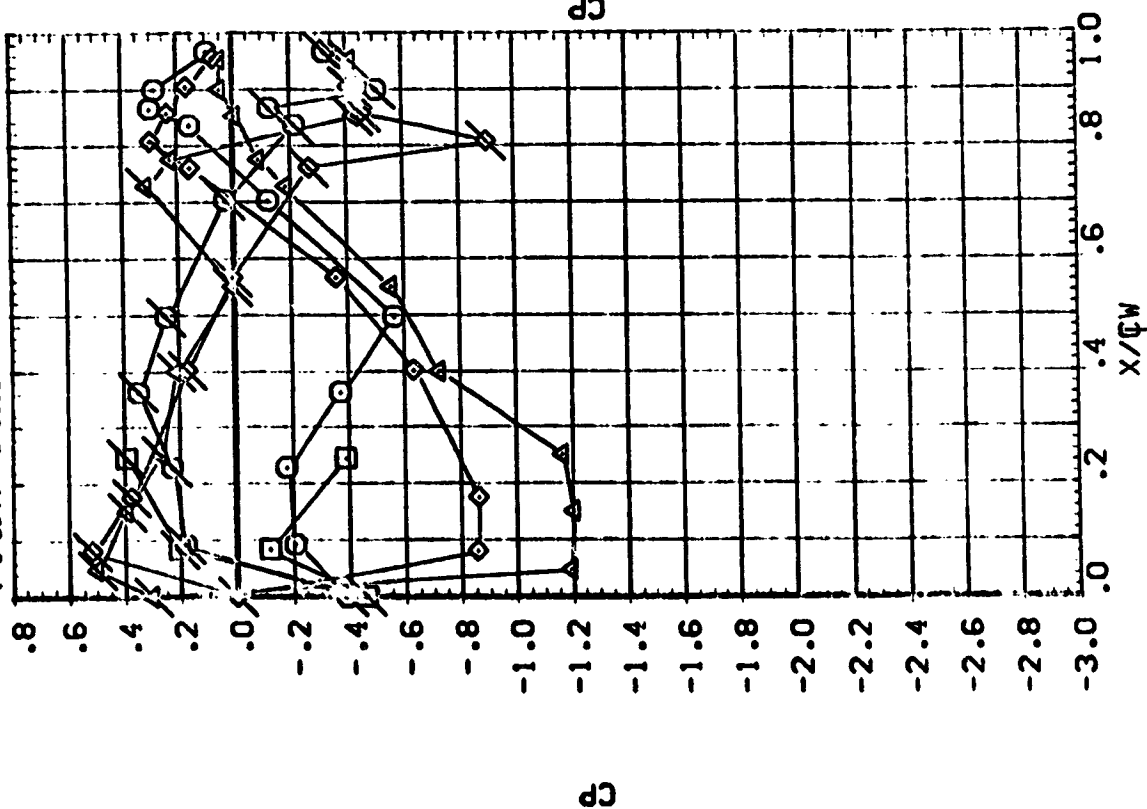


SYMBOL Y/B_u BETA WACH

.289 -8.15C .90C
.354 -4.03C
.477
.534

PARAMETRIC VALUES
ALPHA 10.000 9.000 9.000
ELEVON -10.000 9.000 9.000

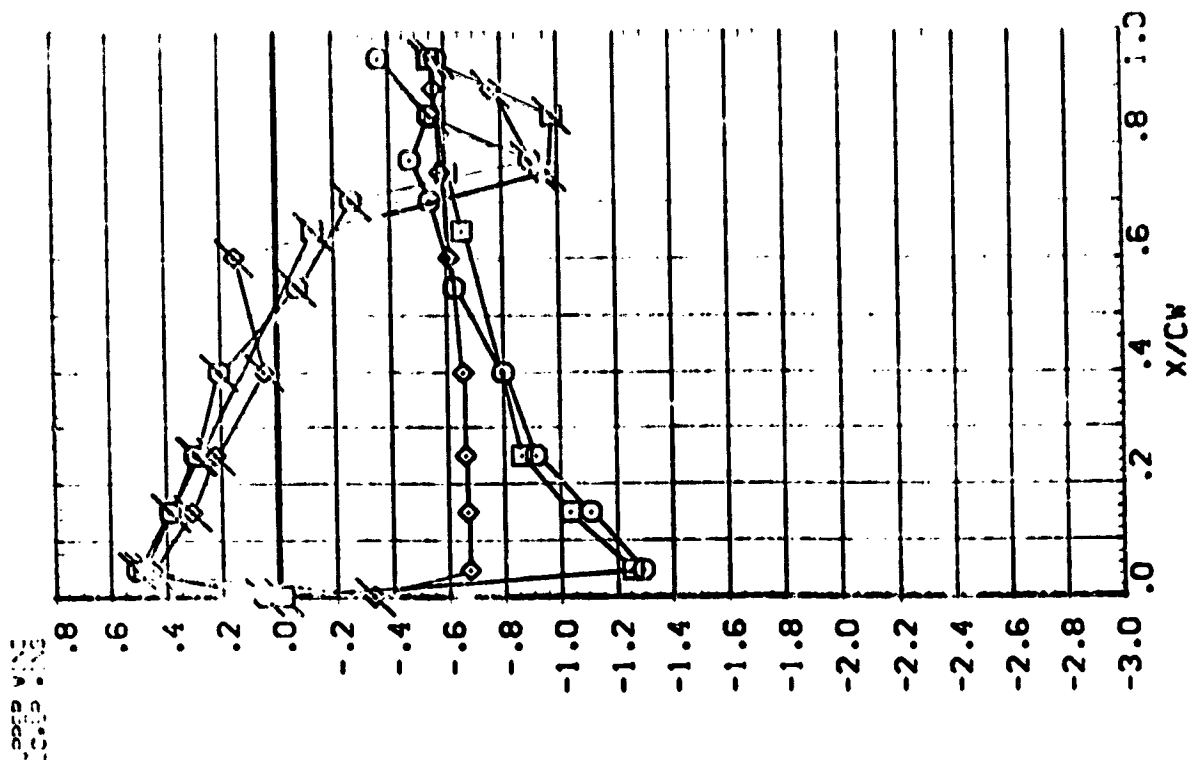
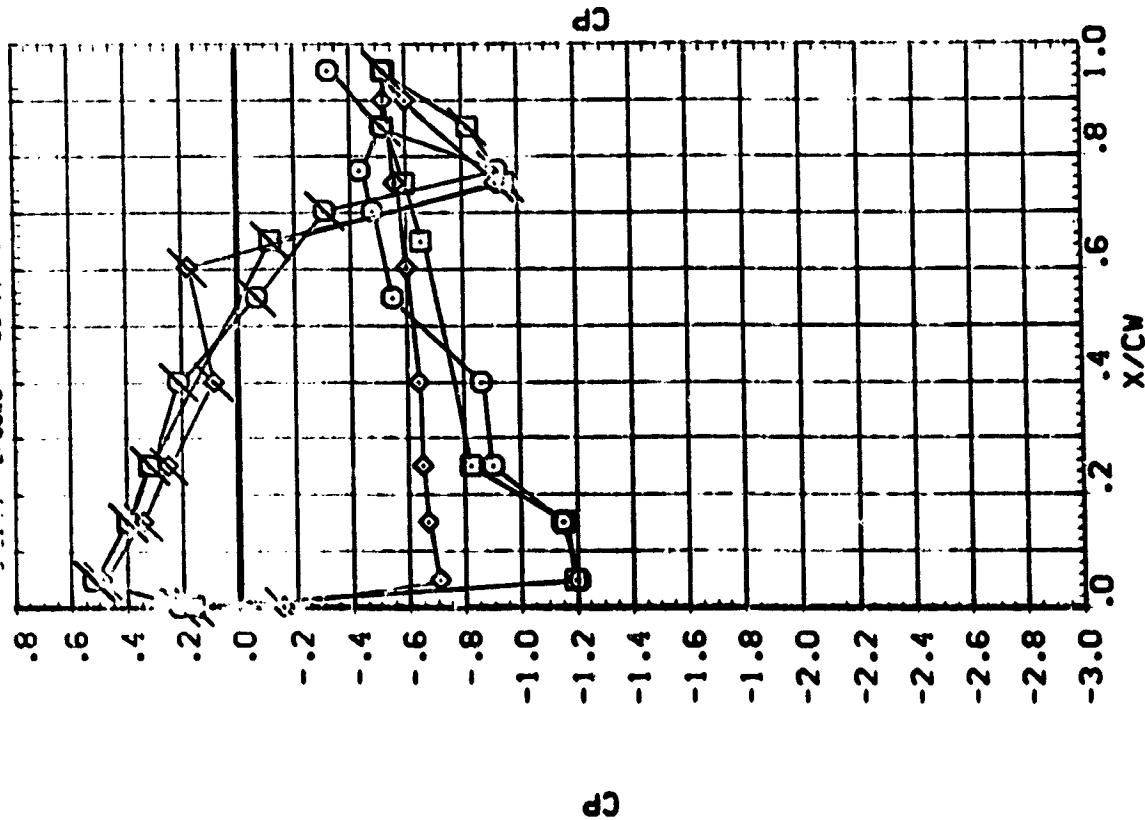
DATA SET SYMBOL CONFIGURATION DESCRIPTION
(332,24) OPEN ANES 11-707 CA12 C7A
(332,24) CLOSED ANES 11-707 CA12 C7A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

SW920: 1/3, .673, .782, .897
 BETA: -5.150, -4.030
 MACH: .800

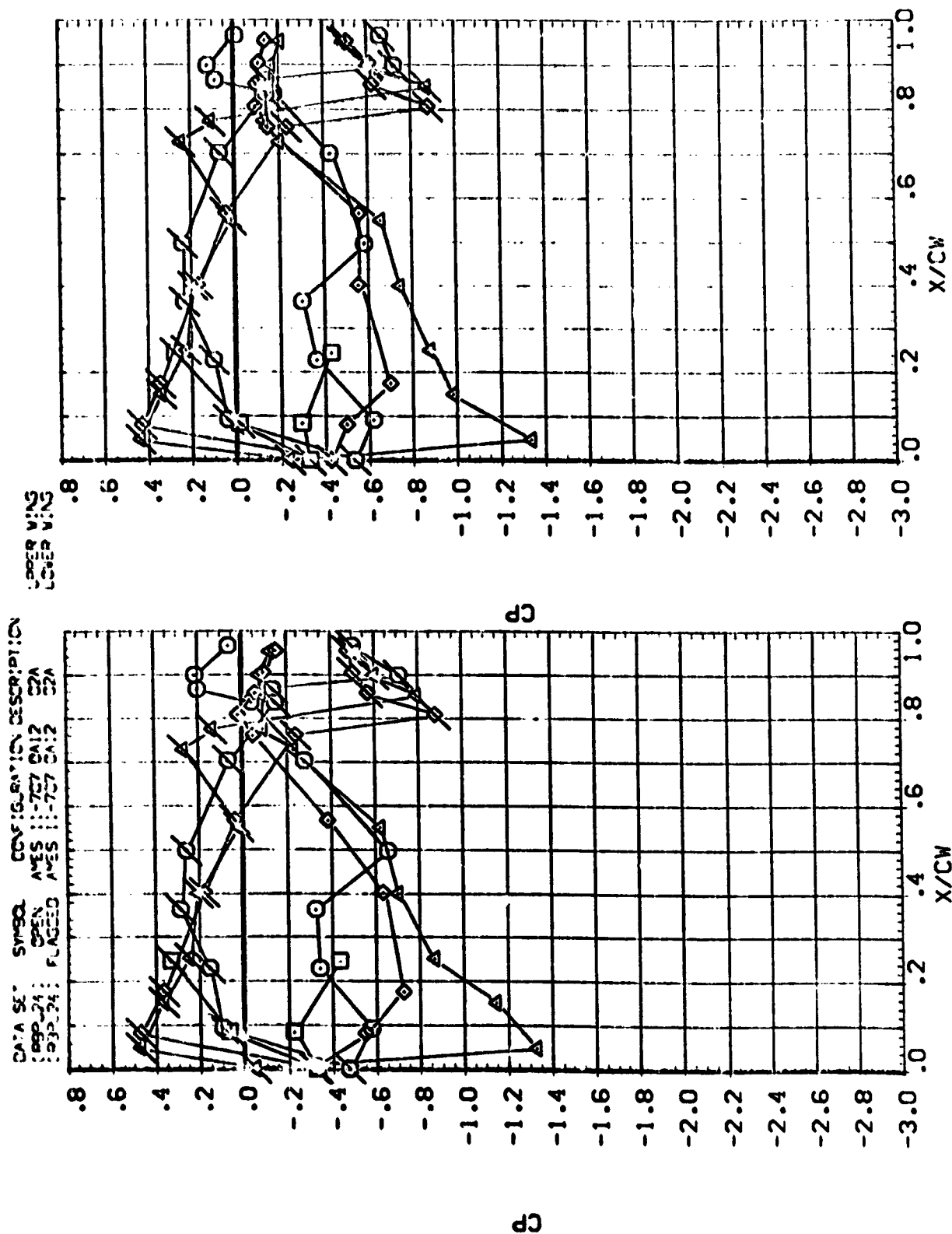
DATA SET: SW920-
 CONFIGURATION DESCRIPTION:
 1092-74: OPEN
 1093-74: FLAGGED
 AVES 11-707 OA12 C2A
 1094-74: FLAGGED
 AVES 11-707 OA12 C2A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

ALPH
 ELEND
 10.000
 10.000
 10.000
 10.000

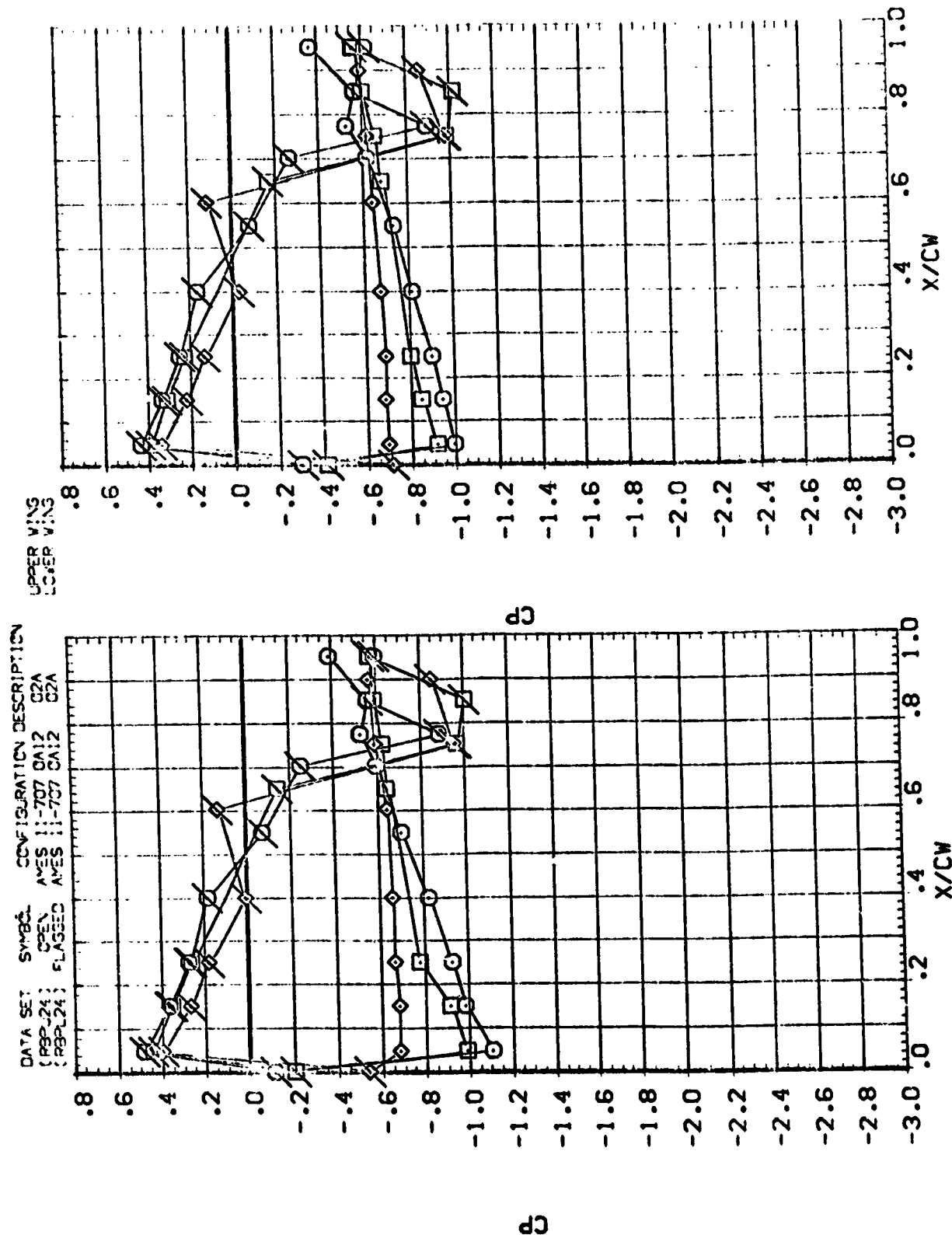
5-23C
 1/2N
 .799
 .364
 .477
 .534
 BETA
 .08C
 4.18C
 MICH
 .90C



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

Symbol	Y/BW	BETA	MACH
◇	.887	4.19C	.90C
□	.78C	.08C	
▽	.673		

PARAVENTRICULAR	VALUES
1	0.00
2	0.00
3	0.00
4	0.00
5	0.00
6	0.00
7	0.00
8	0.00
9	0.00
10	0.00
11	0.00
12	0.00
13	0.00
14	0.00
15	0.00
16	0.00
17	0.00
18	0.00
19	0.00
20	0.00
21	0.00
22	0.00
23	0.00
24	0.00
25	0.00
26	0.00
27	0.00
28	0.00
29	0.00
30	0.00
31	0.00
32	0.00
33	0.00
34	0.00
35	0.00
36	0.00
37	0.00
38	0.00
39	0.00
40	0.00
41	0.00
42	0.00
43	0.00
44	0.00
45	0.00
46	0.00
47	0.00
48	0.00
49	0.00
50	0.00
51	0.00
52	0.00
53	0.00
54	0.00
55	0.00
56	0.00
57	0.00
58	0.00
59	0.00
60	0.00
61	0.00
62	0.00
63	0.00
64	0.00
65	0.00
66	0.00
67	0.00
68	0.00
69	0.00
70	0.00
71	0.00
72	0.00
73	0.00
74	0.00
75	0.00
76	0.00
77	0.00
78	0.00
79	0.00
80	0.00
81	0.00
82	0.00
83	0.00
84	0.00
85	0.00
86	0.00
87	0.00
88	0.00
89	0.00
90	0.00
91	0.00
92	0.00
93	0.00
94	0.00
95	0.00
96	0.00
97	0.00
98	0.00
99	0.00
100	0.00



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES



PARAMETRIC VALUES
10.000
-10.000

ALPHA
ELEVON

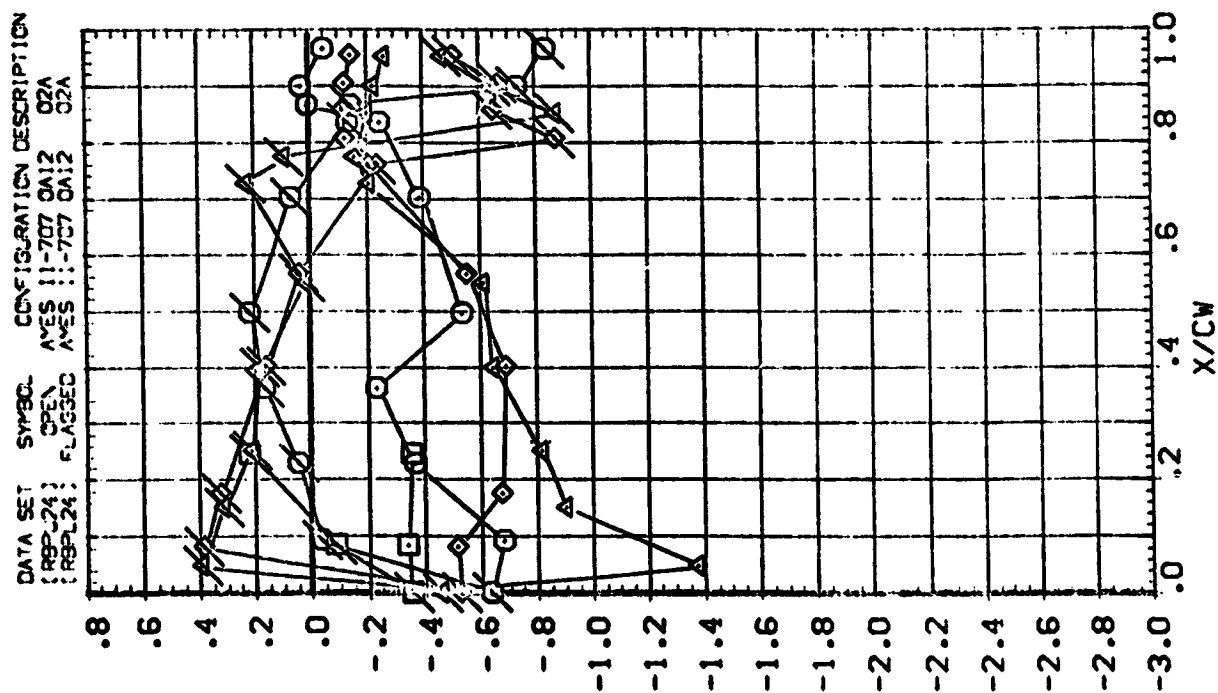
10.000
-10.000

BETA 8.330 MACH .900

Y/BV
.299
.364
.427
.534

SYMBOL
□
◇
△

UPPER WING
LOWER WING



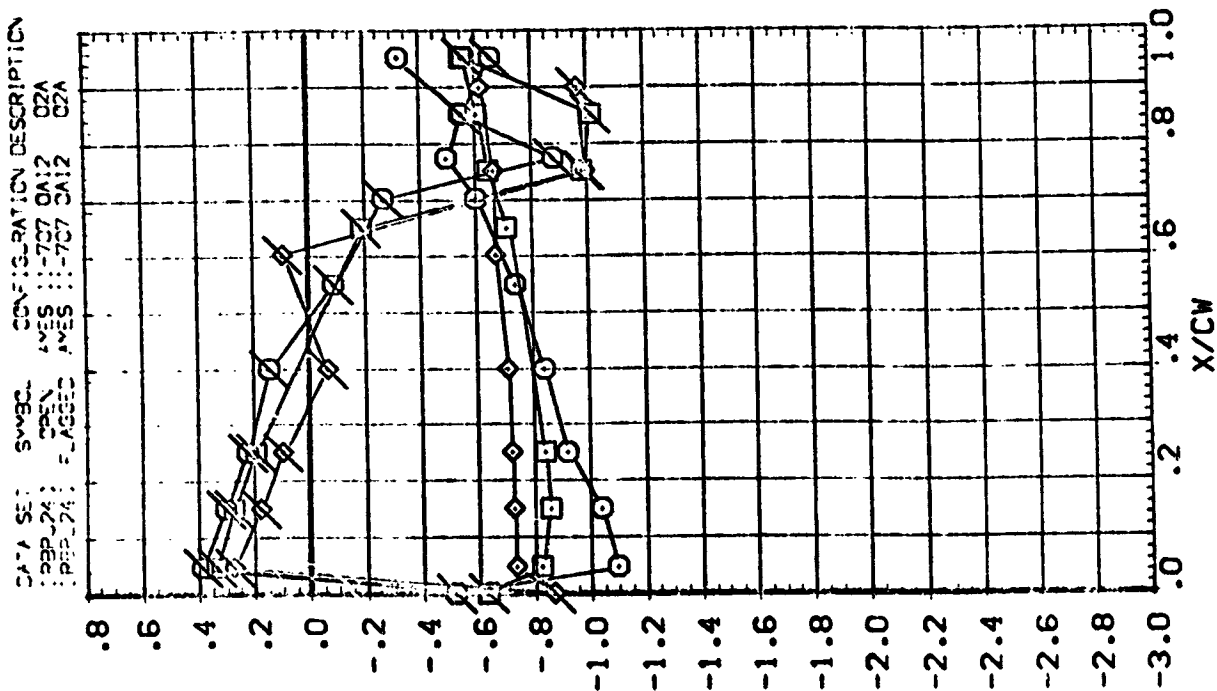
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 10.000 RUDER
 -10.000 RUDER

ALPHA
 ELEVON

PAGE 250

UPPER WING
 LOWER WING



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

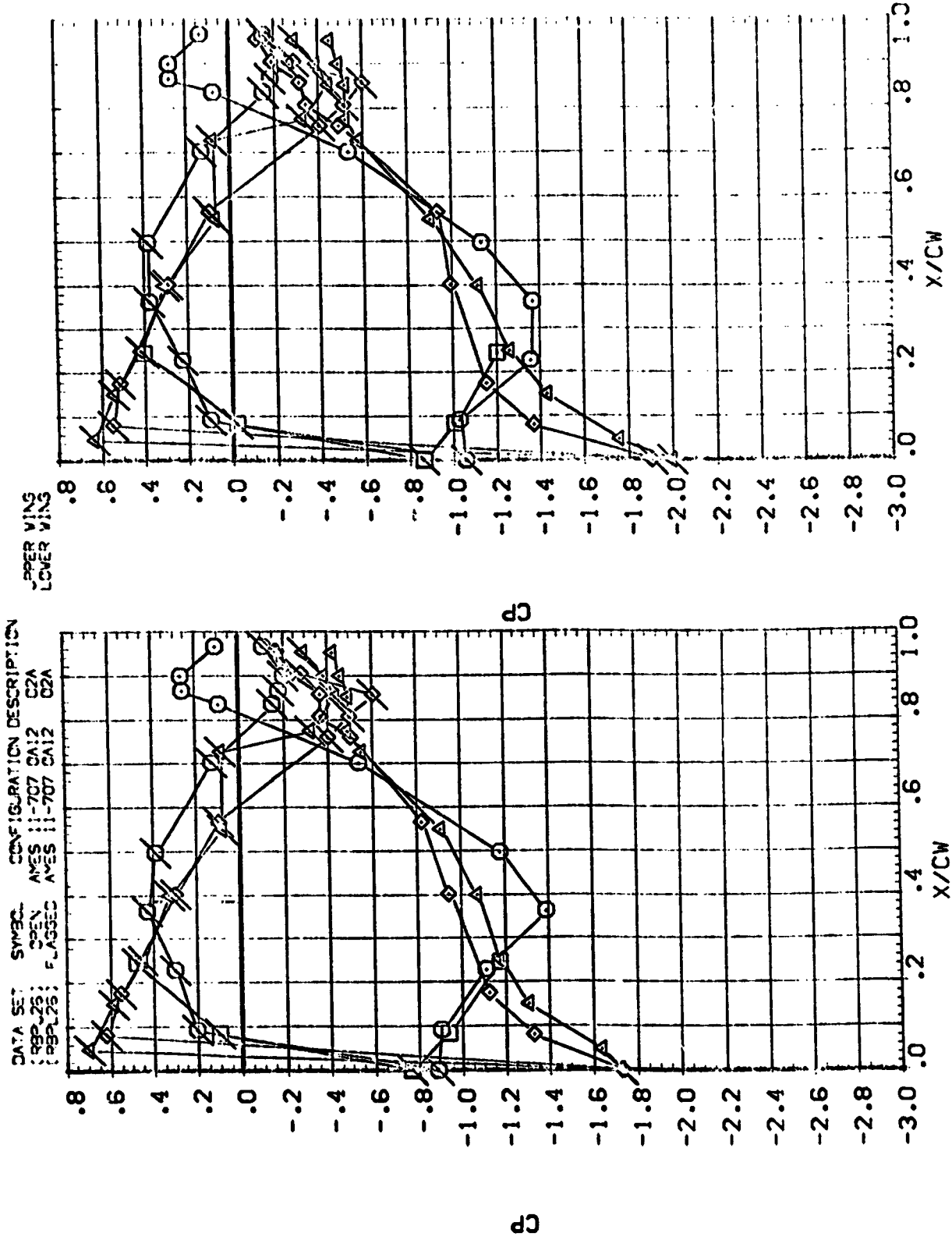
SW30L V/BW 377A 9.33C 100
 .673
 .78C
 .887

93



SYMBOL Y/BV BETA WACH
 .788 -7.980 .587
 .364 -3.550
 .427
 .534

PARAMETRIC VALUES
 ALPHA 20.000 RUDER .000
 ELEVON -10.000 RUDER .000

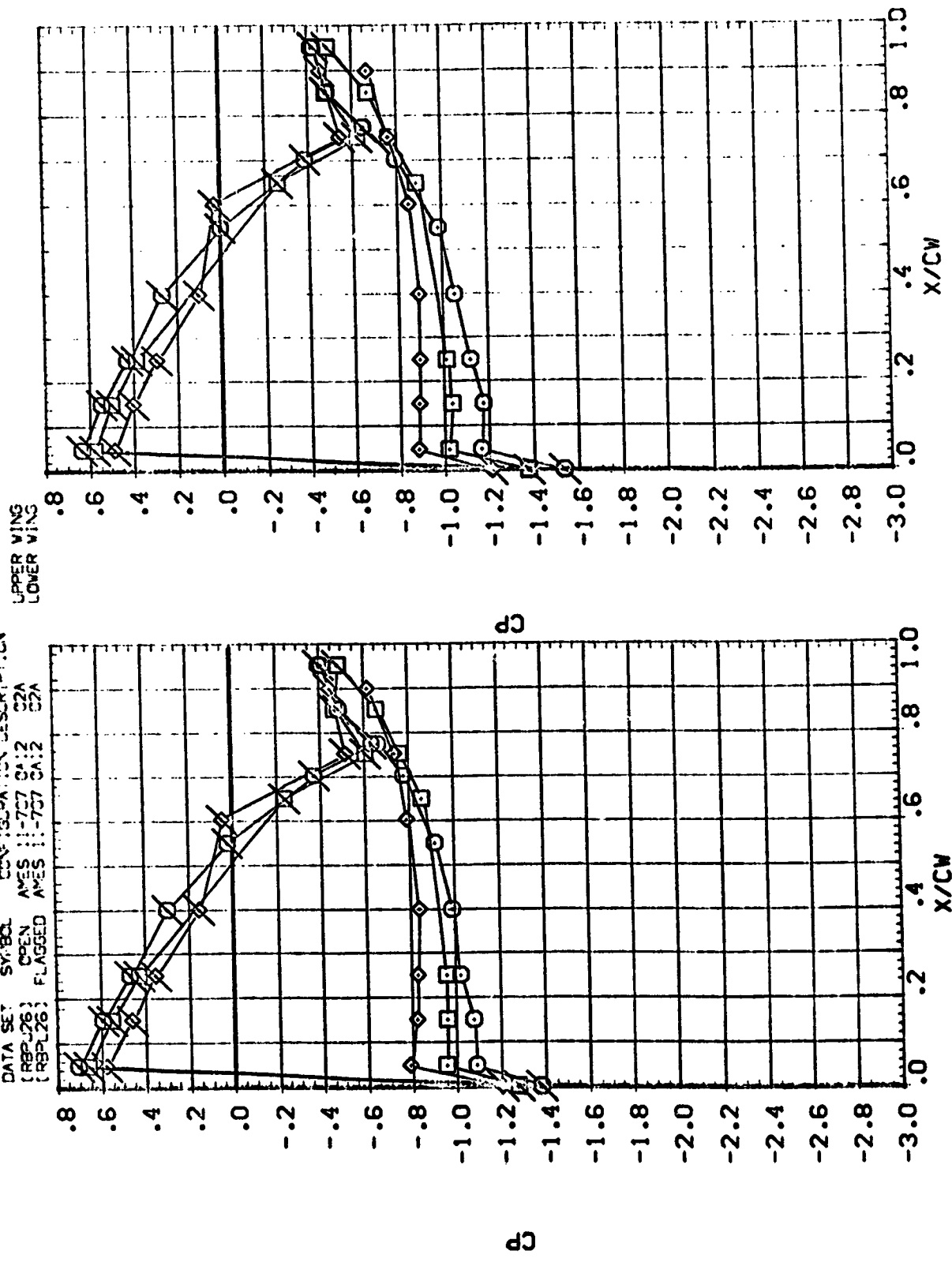


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA 20.000
 ELEV -10.000
 RUDDER .000
 RUDEP .000

SW32- V/B# BETA MACH
 .673 -7.980 .597
 .780 -3.950
 .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RBP-26) OPEN ANES 11-727 CA:2 C2A
 (RBP-26) FLAGGED ANES 11-727 CA:2 C2A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES



SYMBOL Y/BV BETA MACH

○ .299 .070 .587

□ .364 4.190

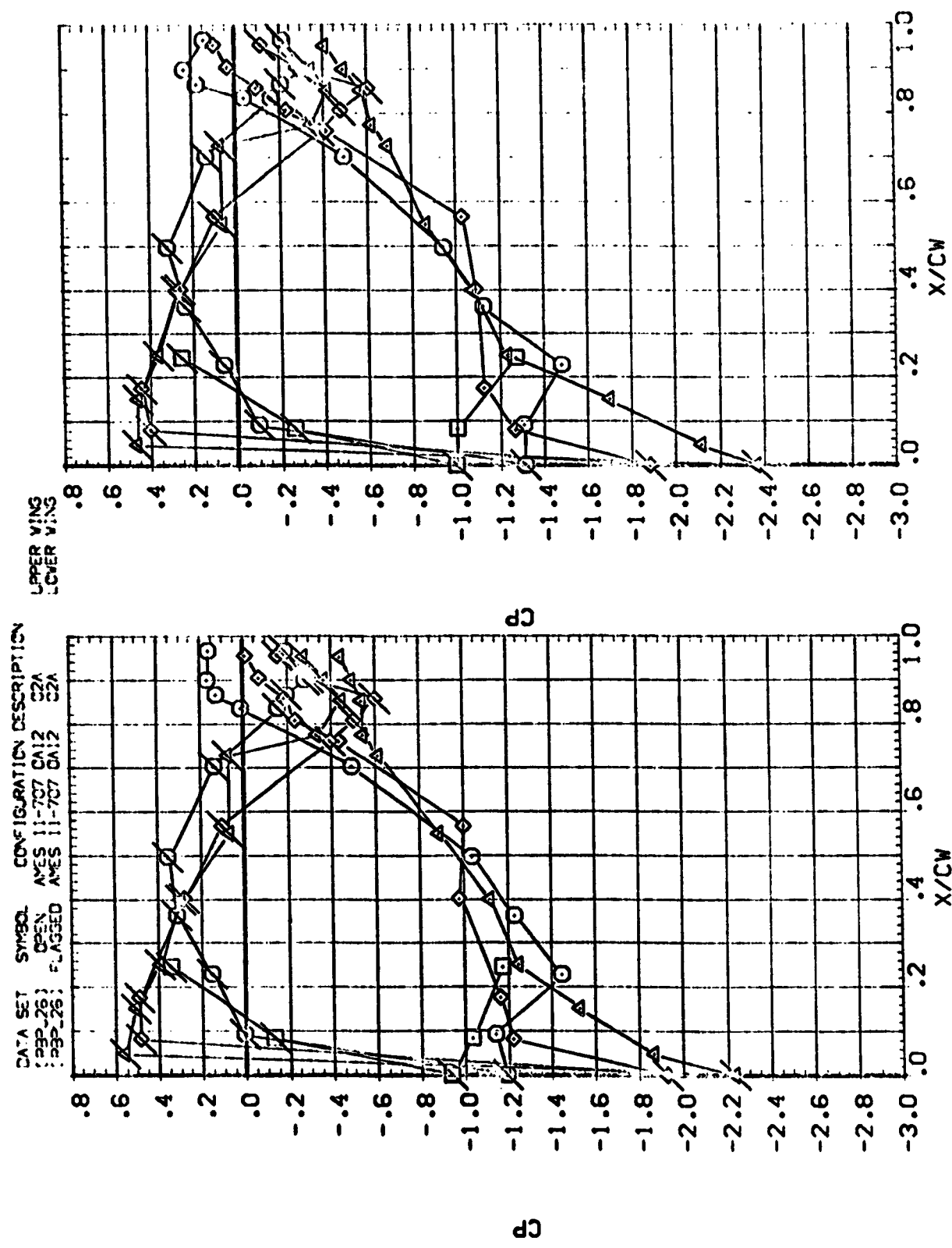
◇ .427

△ .534

PARAMETRIC VALUES

ALPHA 20.000 RUDER .000

ELEVON -10.000 RUDER .000



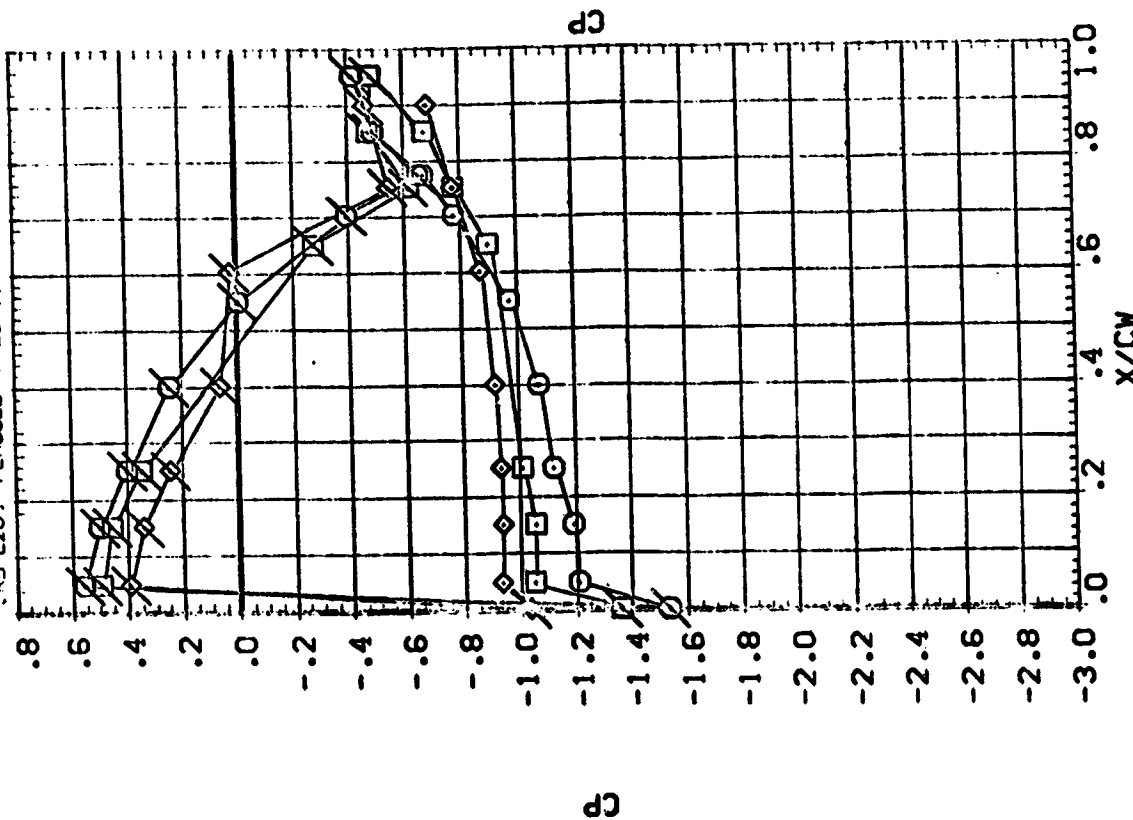
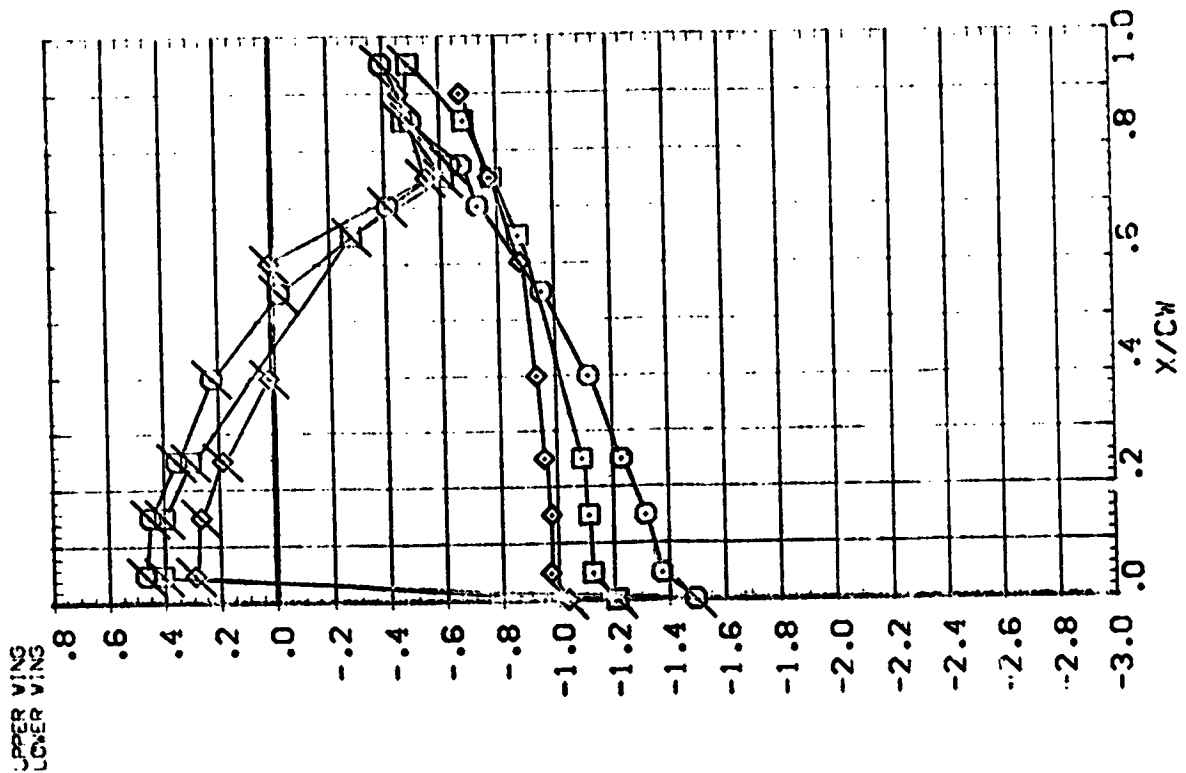


SYMBOL V/B4
0.573
0.78C
0.887

BETA MACH
0.070 .597
4.190

PARAMETRIC VALUES
ALPHA 0.000 0.000 0.000
ELEVON -10.000 0.000 10.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
: 000-26 OPEN AMES 11-737 CA12 C2A
: 000-26 FLAGGED AMES 11-737 CA12 C2A

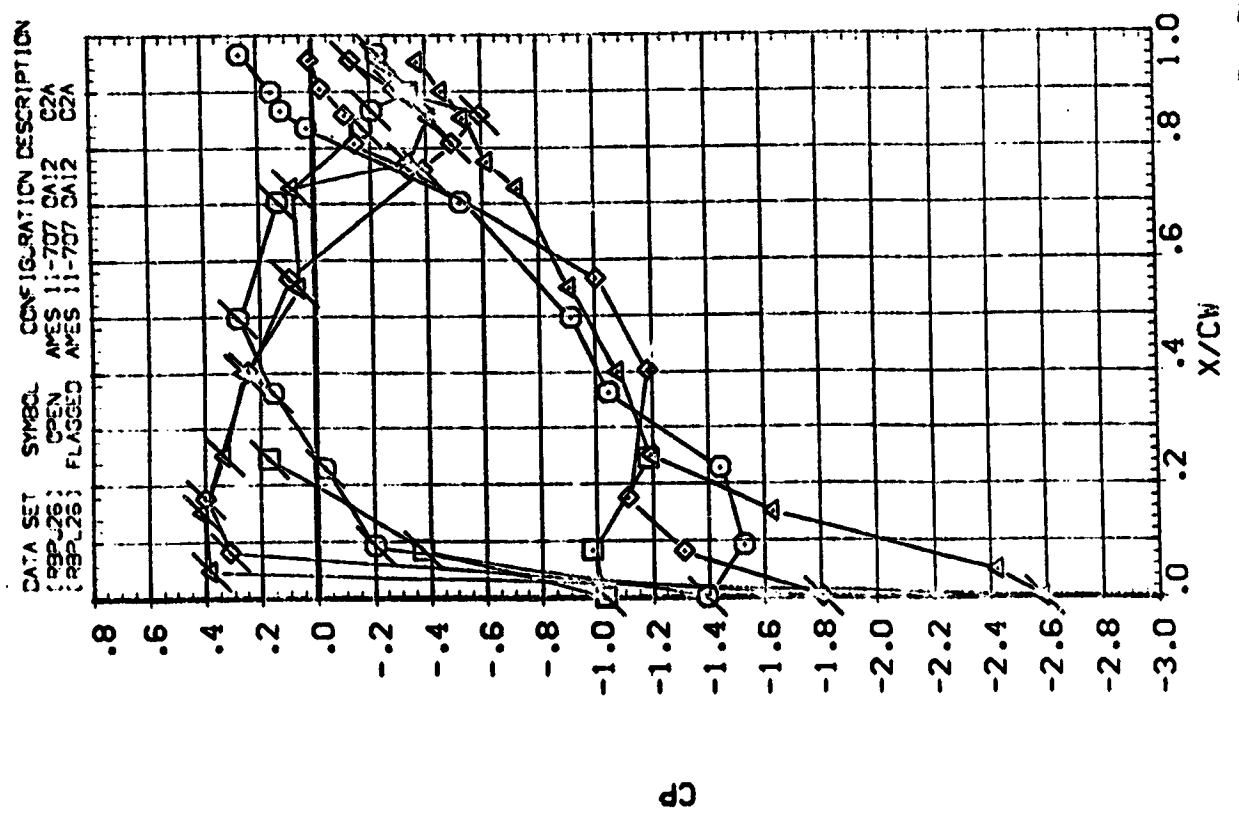


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA 20.000 RUDER .000
 ELEVON -10.000 RUFLR .000

SYMBOL Y/BV BETA MACH
 .299 8.300 .597
 .364
 .427
 .534

UPPER WING
 LOWER WING



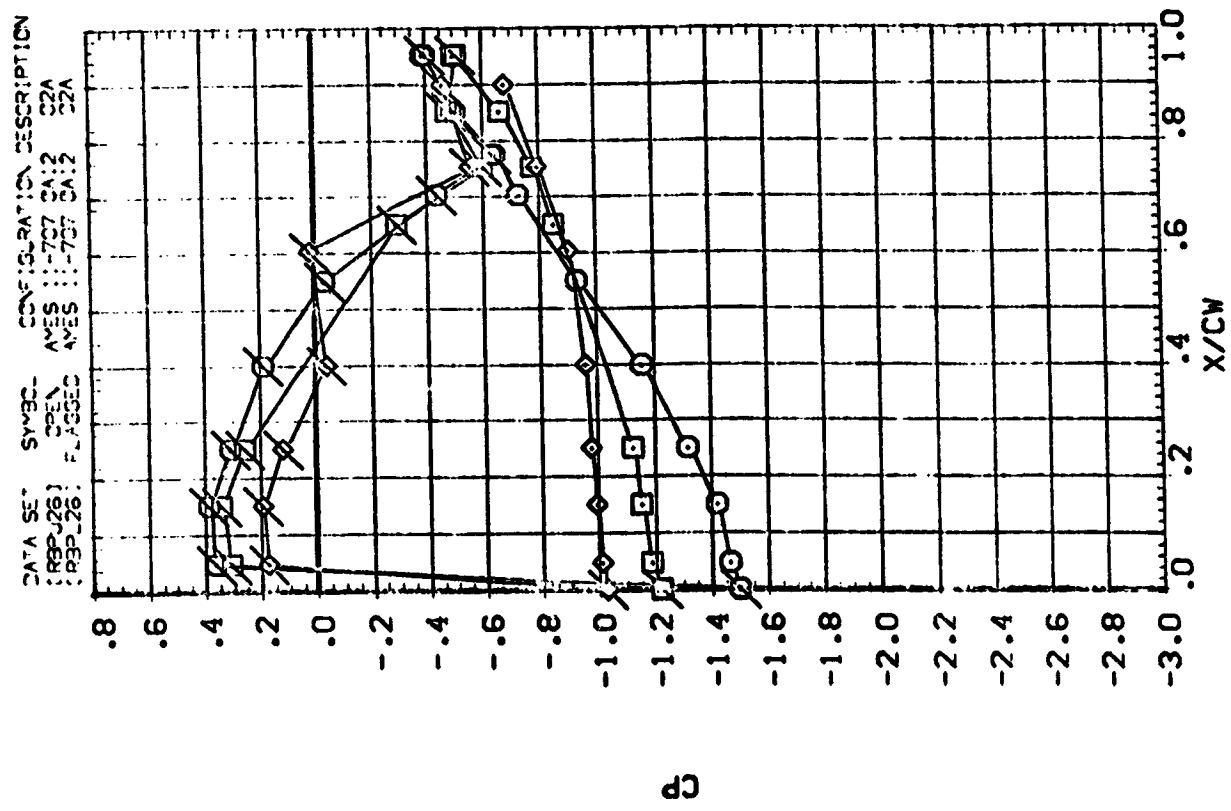
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 70.000 8.000
 1.200 8.000
 1.200 8.000

1.200
 8.000

SYNCH. 1/3% BETA MACH
 .573 8.300 .587
 .780
 .887

UPPER WING
 LOWER WING



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES



SYNCH- Y/BH .289
 .354
 .477
 .534

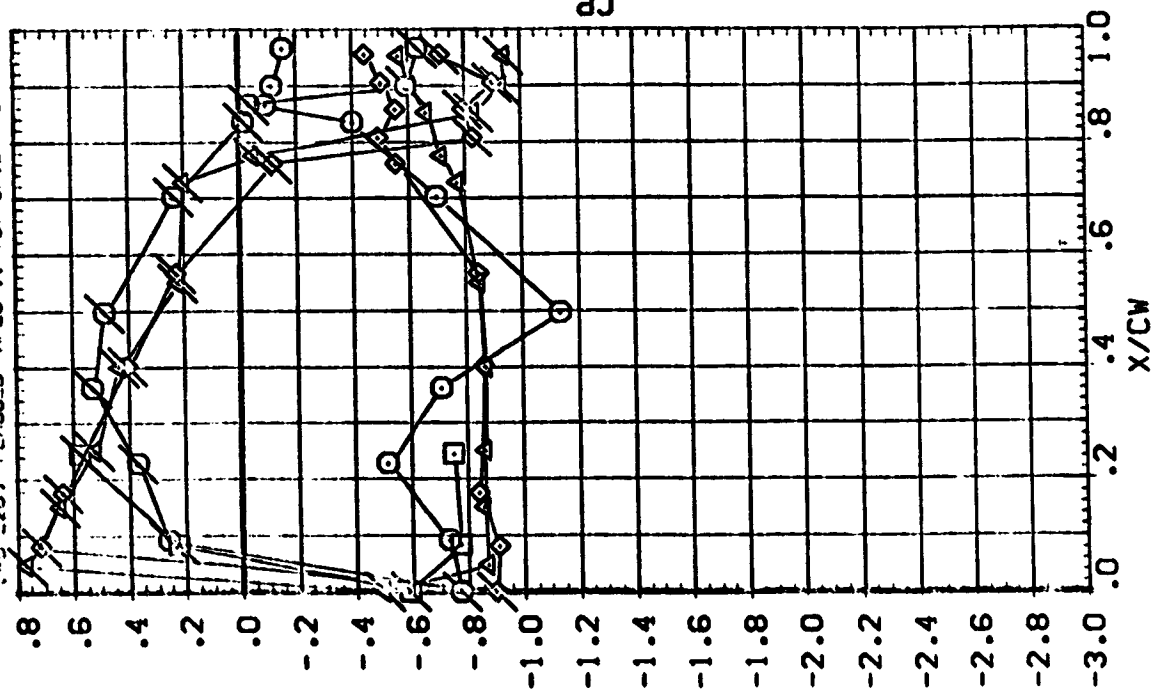
BETA -8.37C
 -3.99C

MACH .903

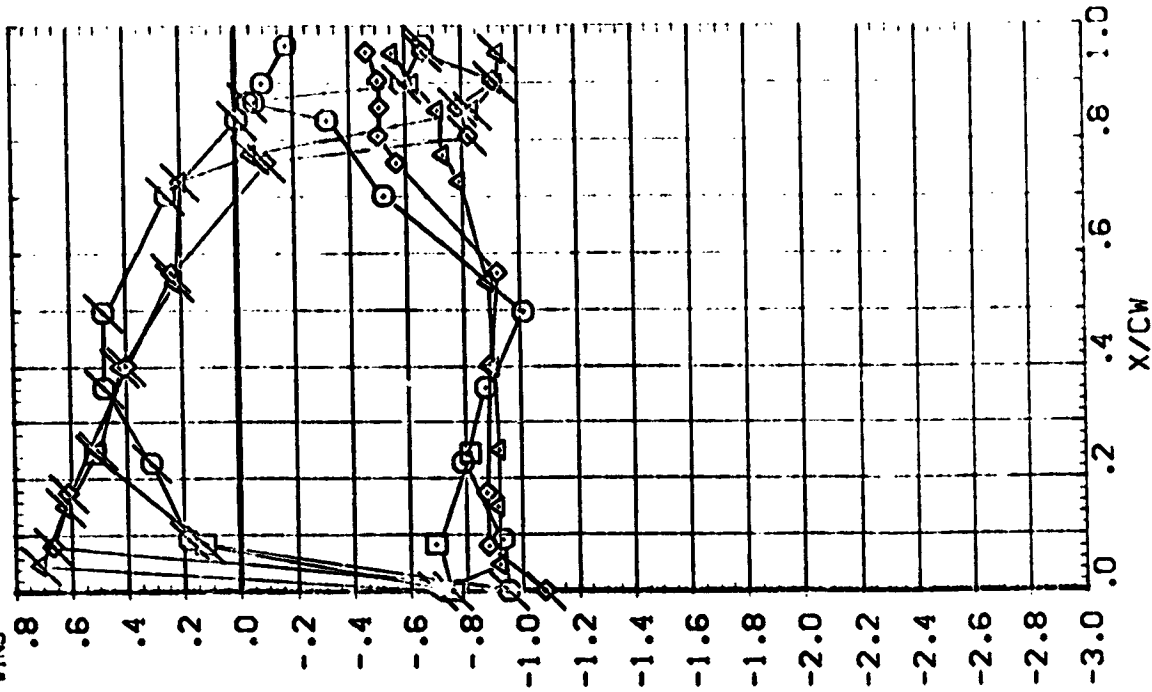
PARAMETRIC VALUES
 ALPHA 20.000
 ELEVON -10.000

2.000
 2.000

DATA SET SYMBO: CONFIGURATION DESCRIPTION
 :REP.26: OPEN AMES 11-707 OA12 C2A
 :REP.26: FLAGGED AMES 11-707 OA12 C2A



UPPER WING
 LOWER WING



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

SYMBOL

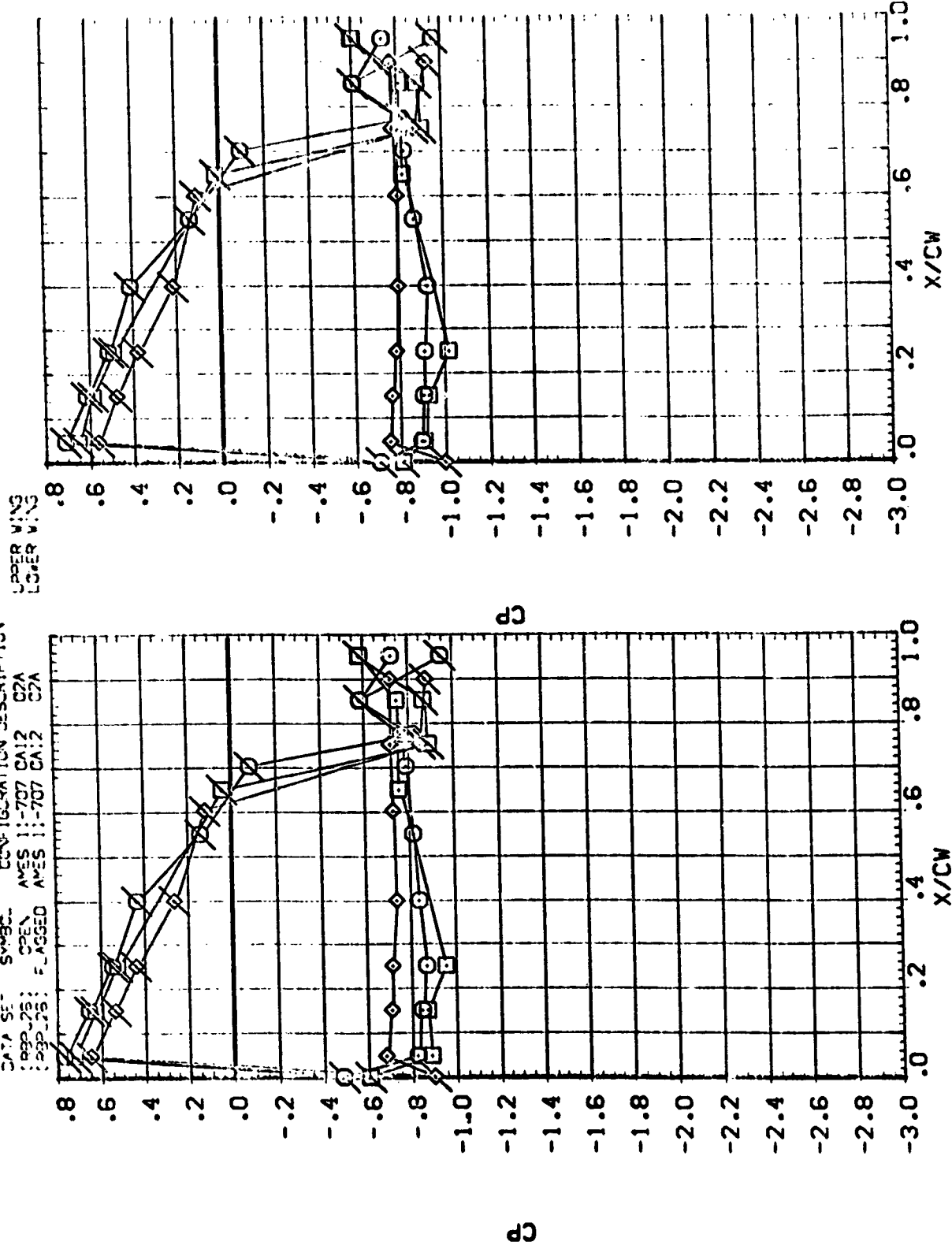
Y/BV
.673
.78C
.887

BETA
-8.070
-3.990

MACH
.903

PARAMETRIC VALUES
ALPHA
ELEVON
20.000
-10.000
2.000
-2.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
1880 125 OPEN ARES 11-707 CA12 C7A
1880 125 FLAGGED ARES 11-707 CA12 C7A





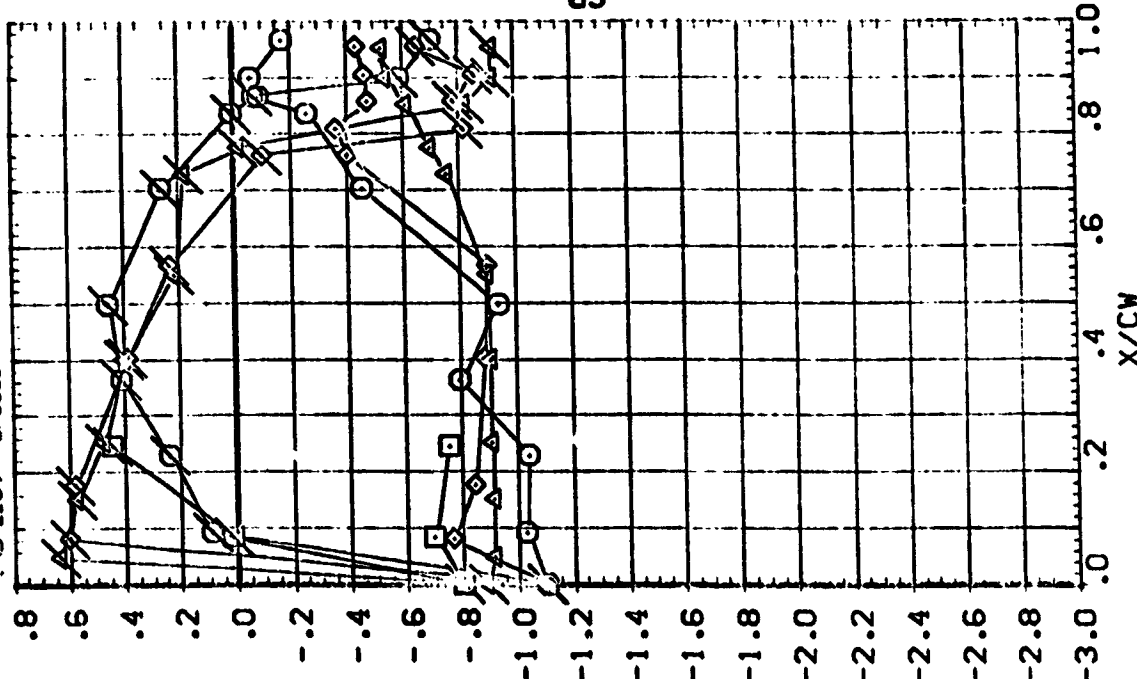
SYMBOL
 V/BV
 .299
 .364
 .427
 .534

BETA
 .080
 4.230

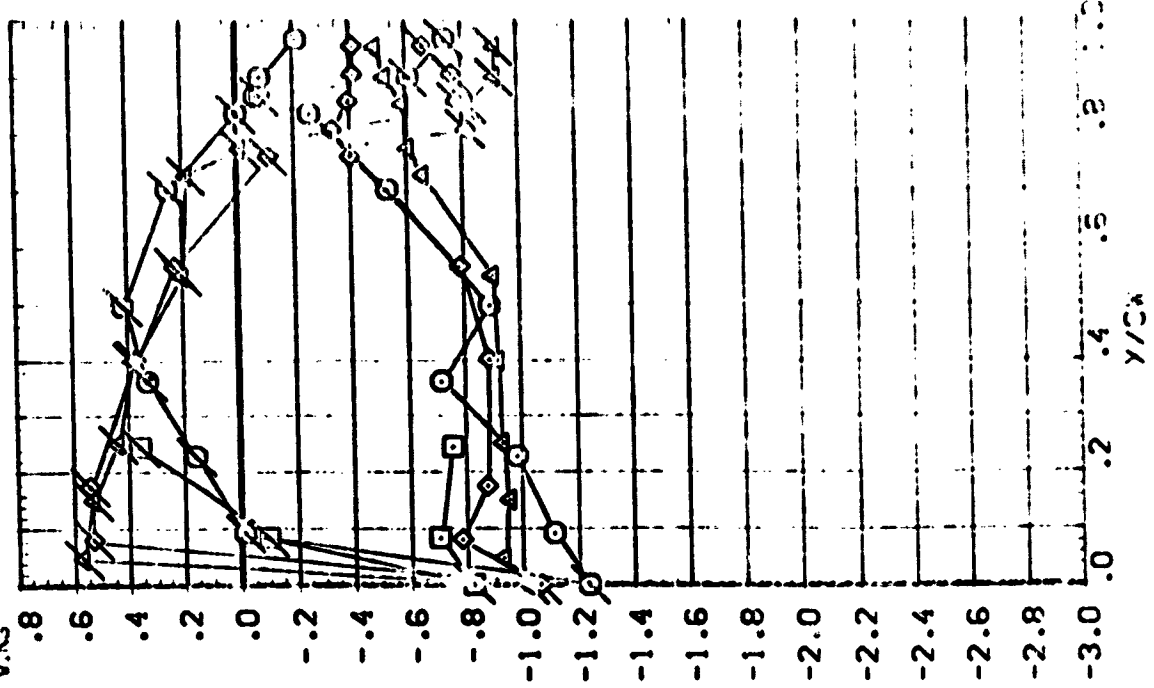
MACH
 .903

ALPHA
 ELEVON
 20.000
 -10.000
 9.000
 9.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RSP-26) OPEN AVES 11-707 CA:2 32A
 (RSP-26) FLANGED AVES 11-707 CA:2 32A



UPPER WING
 LOWER WING

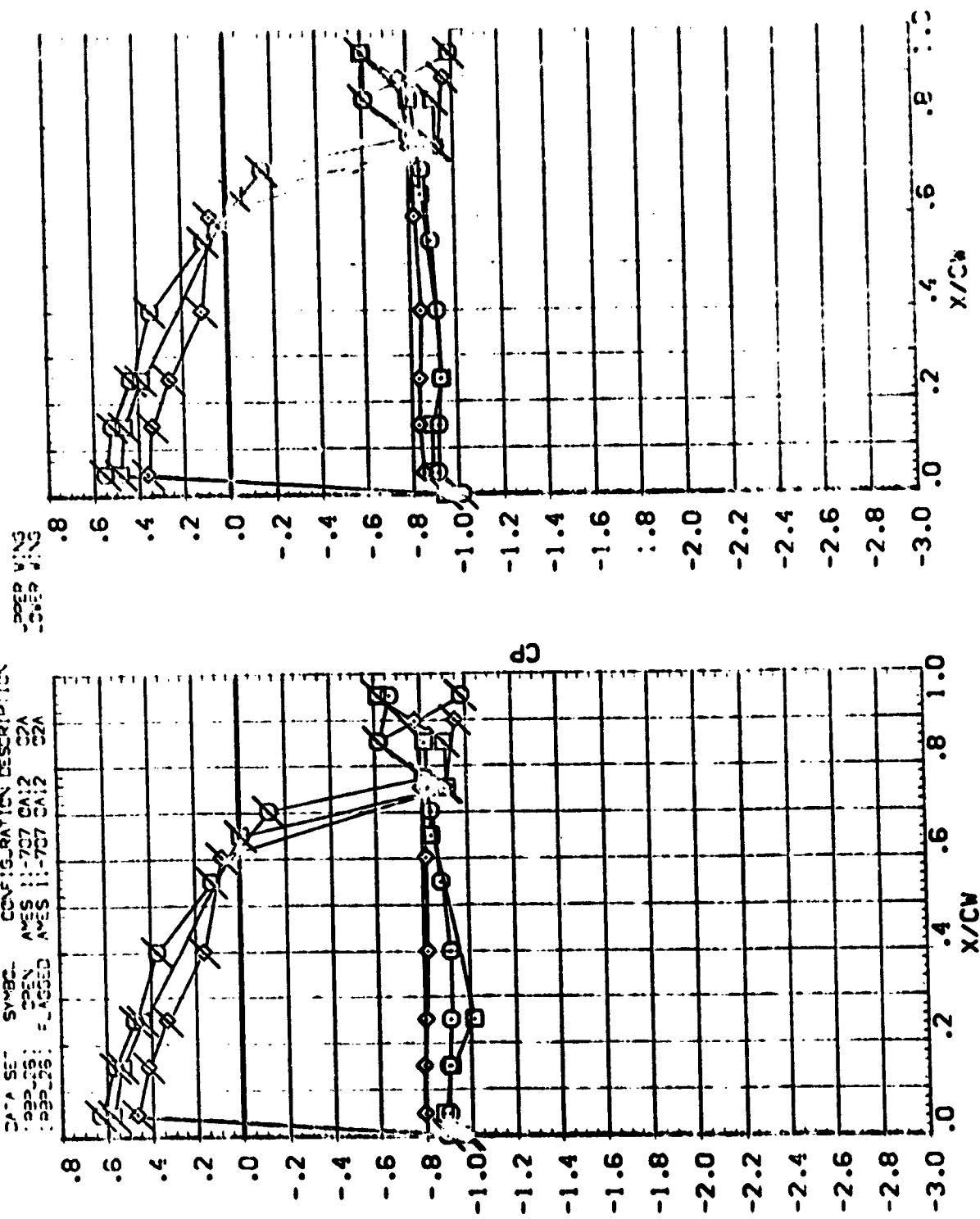


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

SYNOPSIS: V/B. .573 .78C .93
 BETA .08C 4.23C
 MACH .903

ALPHA
 ELEV

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 193-25 OPEN ASES 11-707 CA12 C2A
 193-26 FLAGGED ASES 11-707 CA12 C2A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES



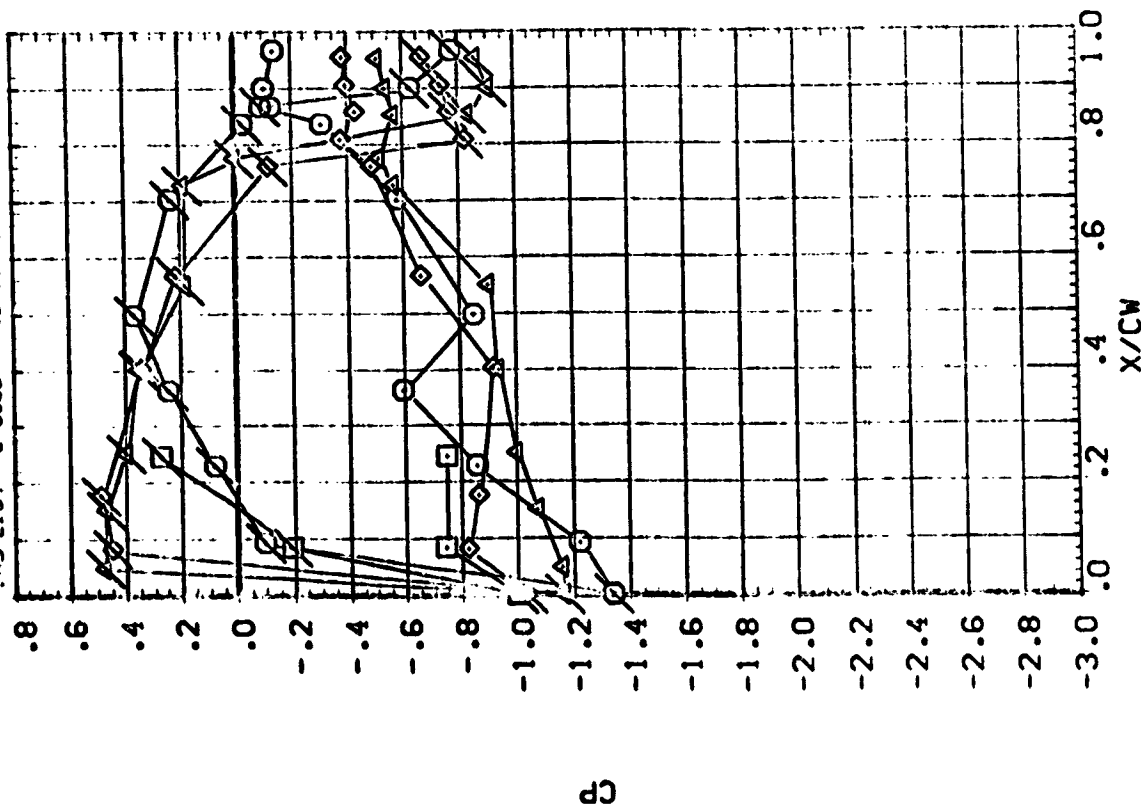
SYSC. 1/31
 .789
 .354
 .477
 .534

SE'A MAC-
 0.360 .603

PARAMETER VALUES
 AREA 20000
 ELEV 20000
 PERM 20000

DATA SET SYSC. CONFIGURATION DESCRIPTION
 :R9276 : OPEN ASES 11-707 CA12 CDA
 :R9276 : FLOUED ASES 11-707 CA12 CDA

PERM VING
 LOWER VING

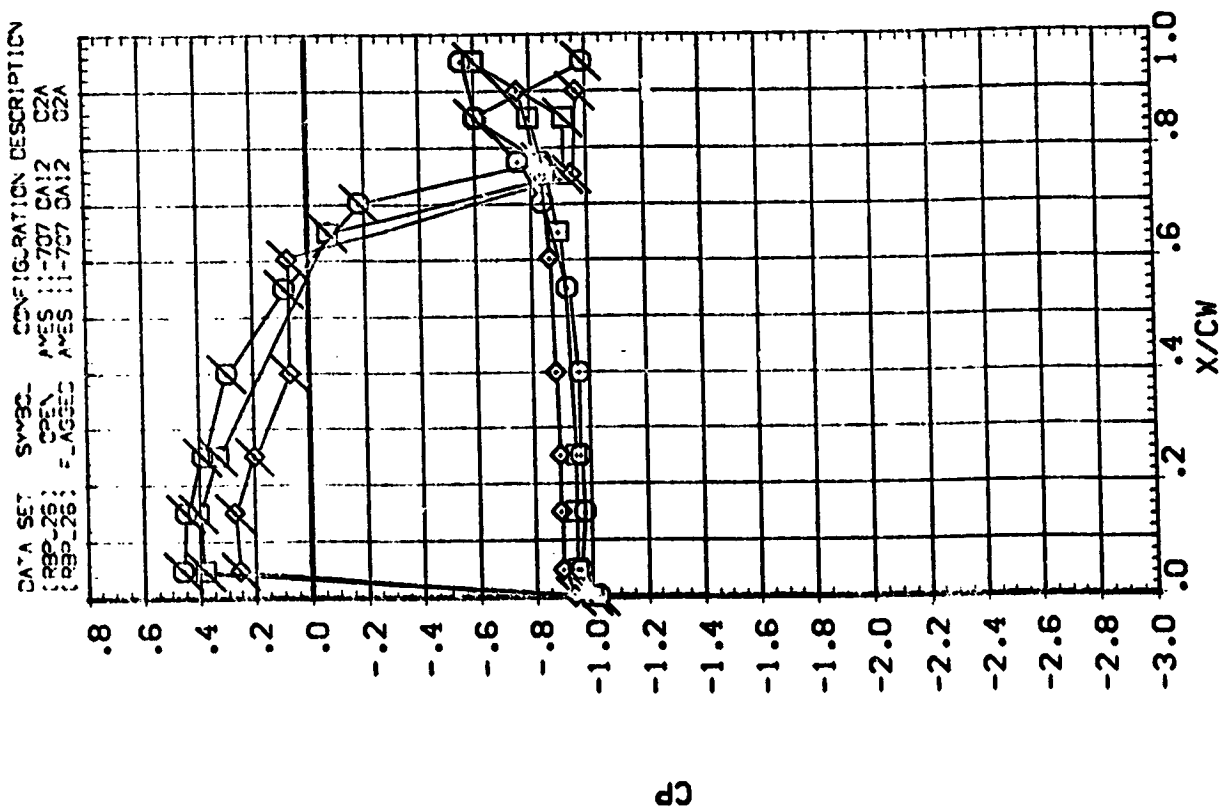


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA 20.000
 ELEVON 20.000
 RUDER 20.000
 RUDDER 20.000

SYMBL Y/BV BETA WACH
 .573 8.360 .903
 .78C
 .887

UPPER WING
 LOWER WING



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

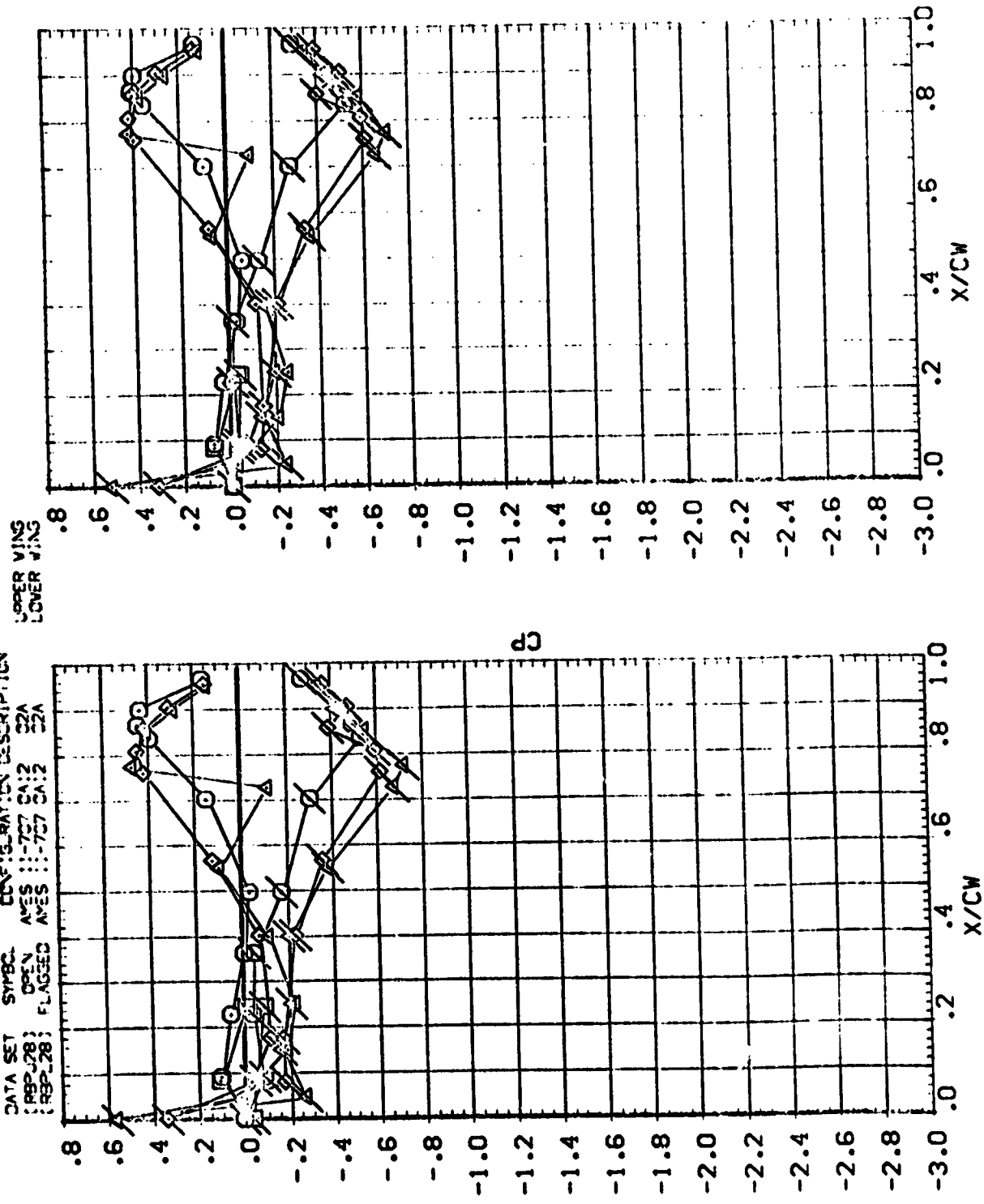


SYMBOL
 V/BV
 .299
 .364
 .427
 .534

BETA
 -7.970
 -3.940

ALPHA
 ELEVON
 -20.000
 -20.000
 .000
 .000

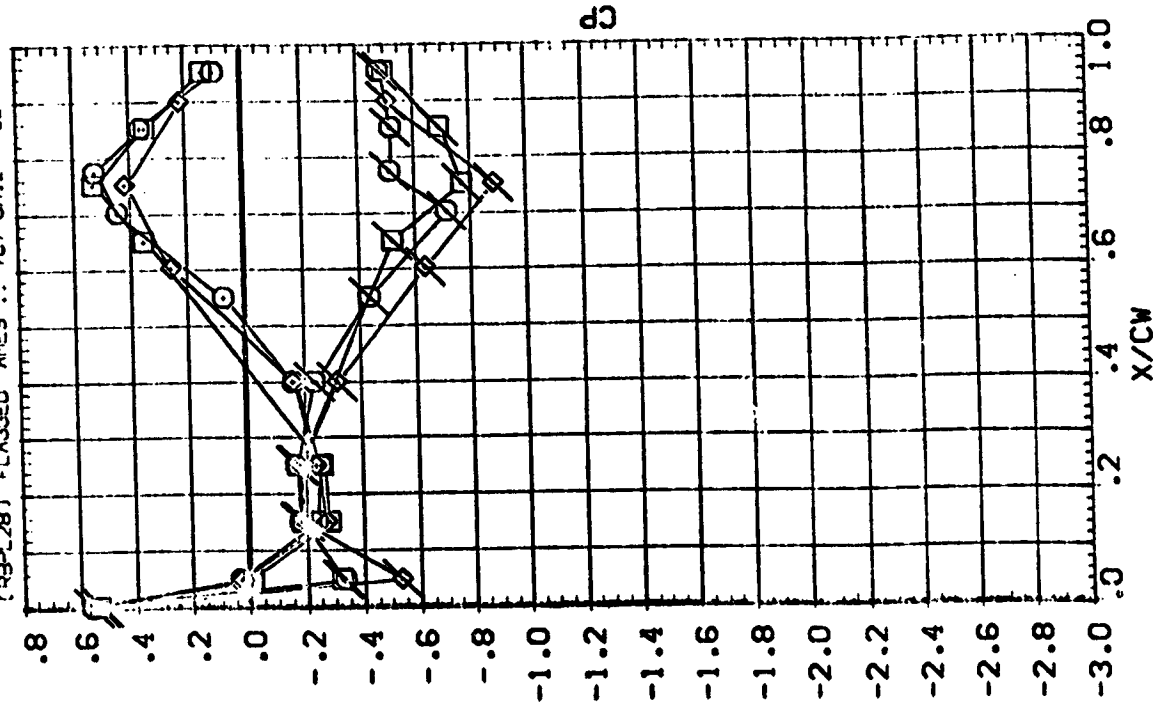
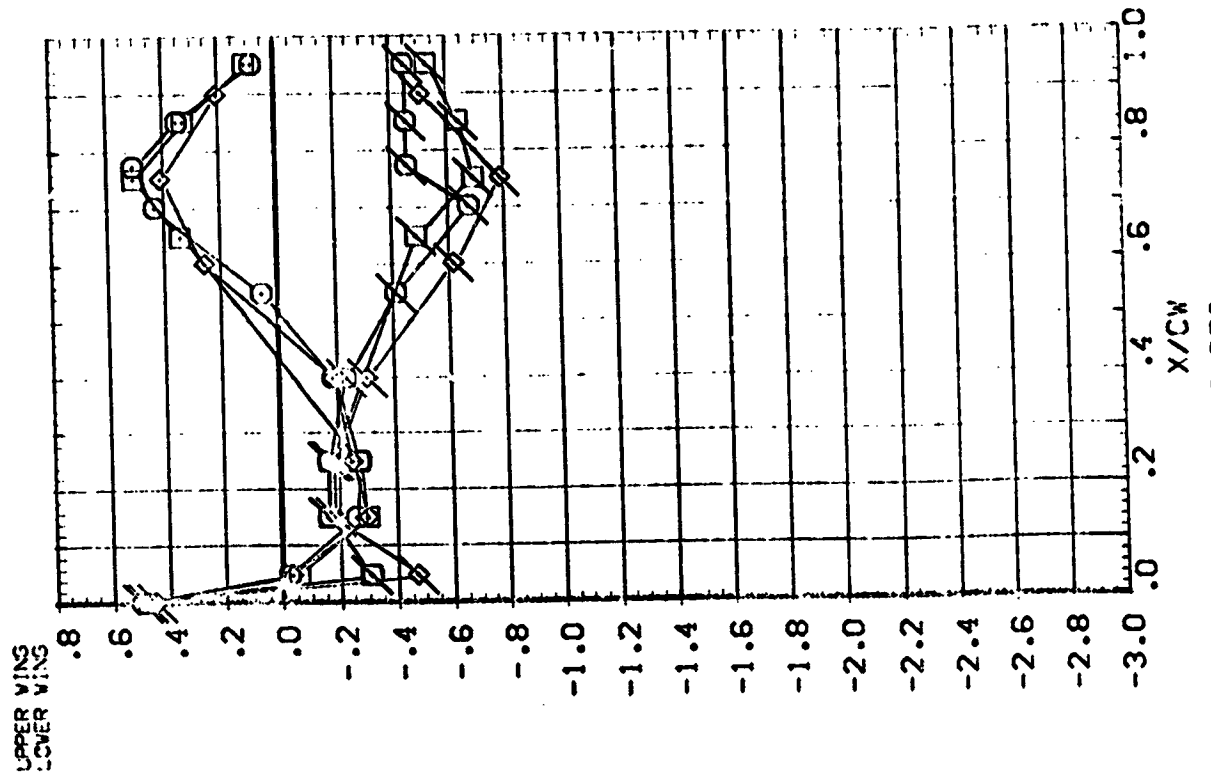
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RSP-28) OPEN AYES 1:1-707 CA:2 32A
 (RSP-28) FLAGGED AYES 1:1-707 CA:2 32A



ALPHA
ELEV

TEST	FE/A	BETA	MAC
1	.673	-7.970	.597
2	.78C	-3.940	
3	.887		

DATA SET	SYMBOL	CONFIGURATION	DESCRIPTION
(RBP_28)	OPEN	AVES 11-707 CA:2	CA2
(RBP_28)	ELASSED	AVES 11-707 CA:2	CA2



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

756 546



SYMBOL
○ □ ◇ △

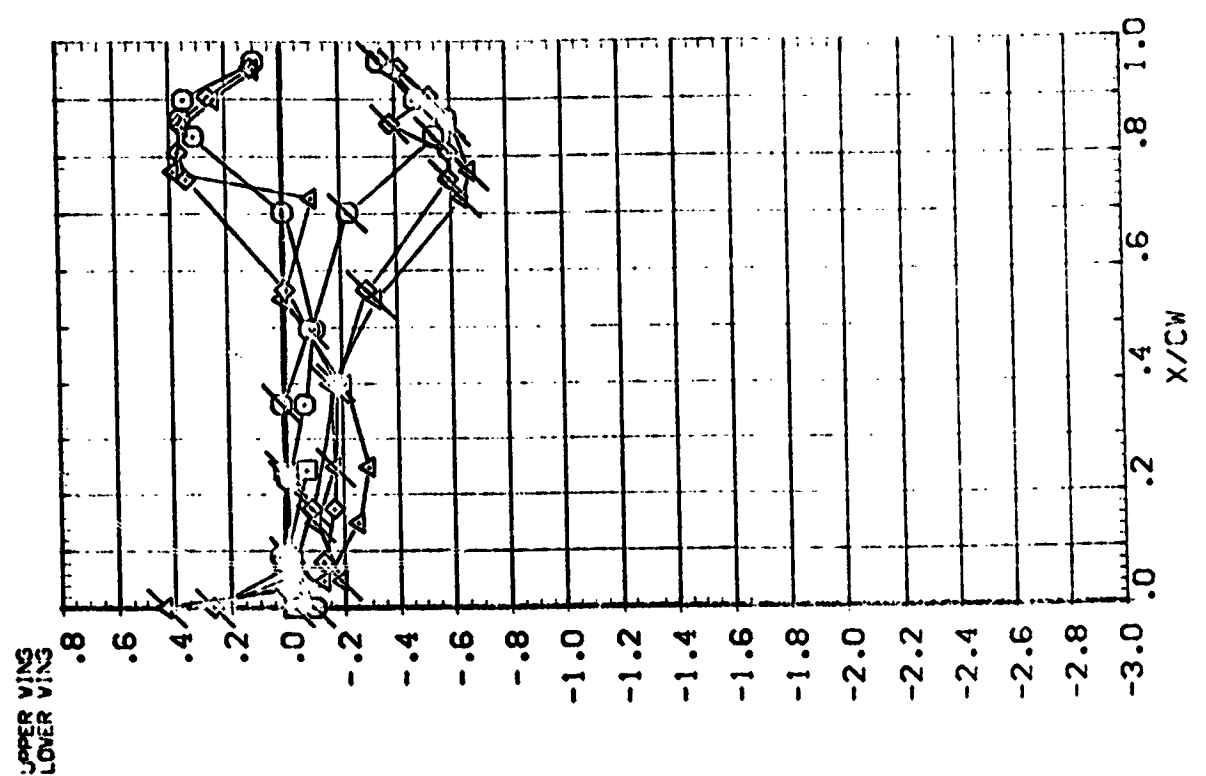
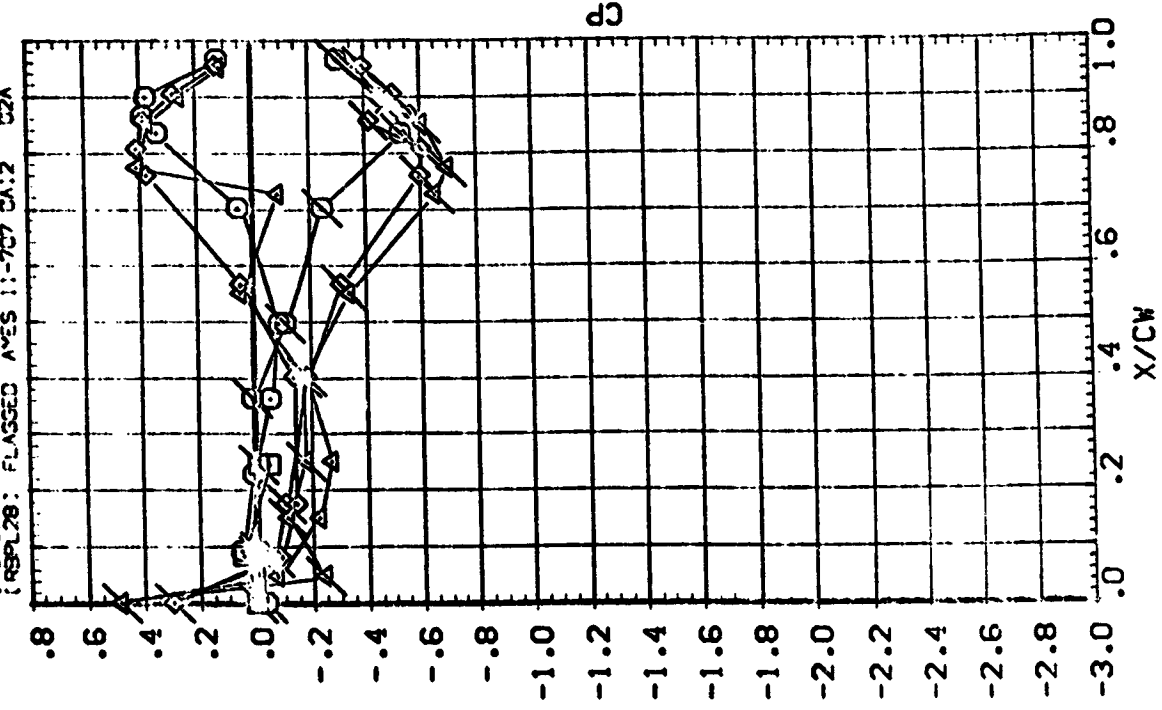
Y/BV
.299
.364
.427
.534

BETA
.090
4.190

MACH
.587

PARAMETRIC VALUES
ALPHA
ELEVON
-20.000
-20.000
RUDER
RUDER
.000
.000

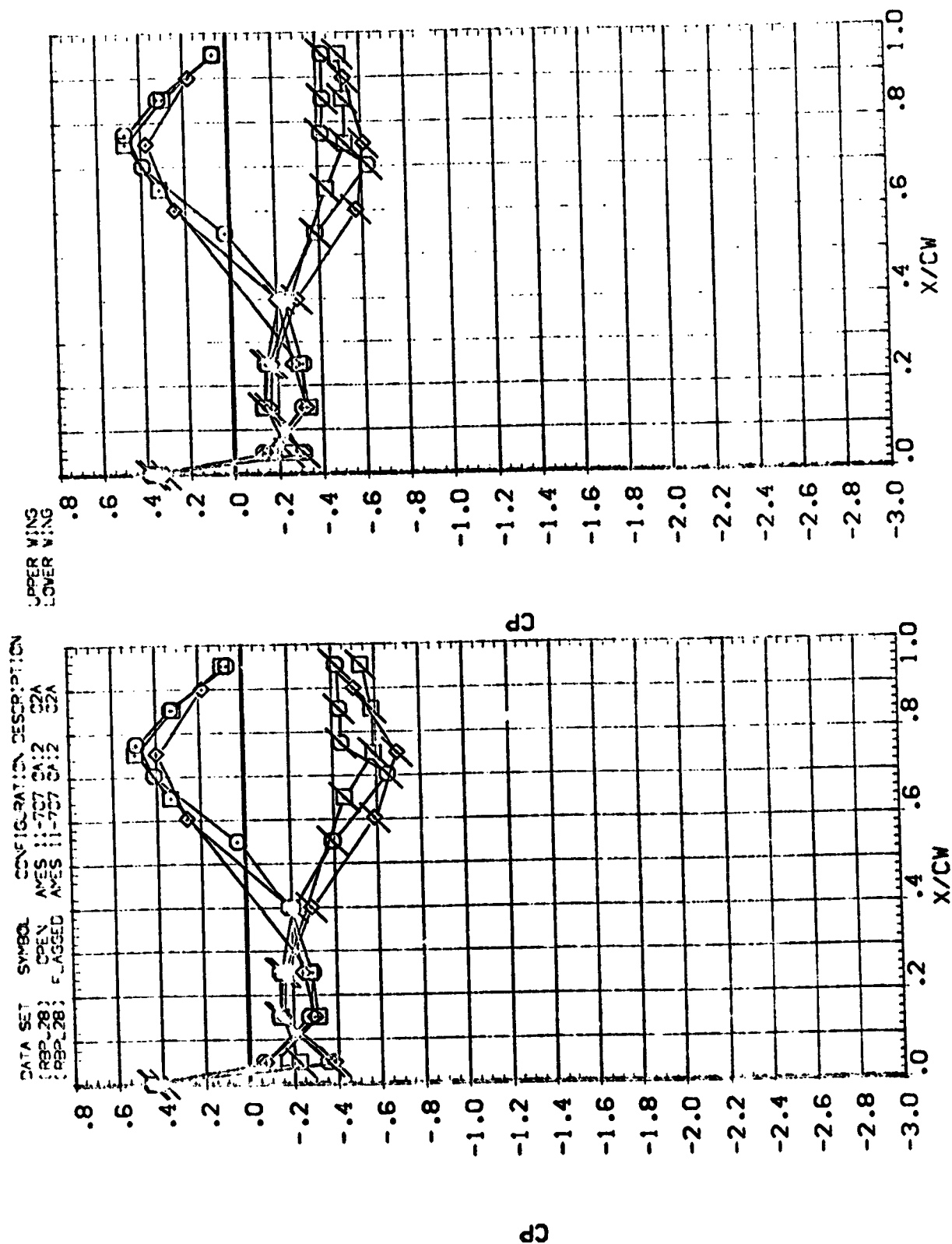
DATA SET SYMBOL CONFIGURATION DESCRIPTION
(RBP-28) OPEN AVES : -707 DA12 C2A
(RBP-28) FLAGGED AVES : -707 DA12 C2A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA
 ELEVON
 RUDDER
 RUDDER
 .000
 .000
 -20.000
 .000

SYNTHETIC
 Y/BV
 .573
 .78C
 .997
 BETA
 .090
 4.190
 MACH
 .597

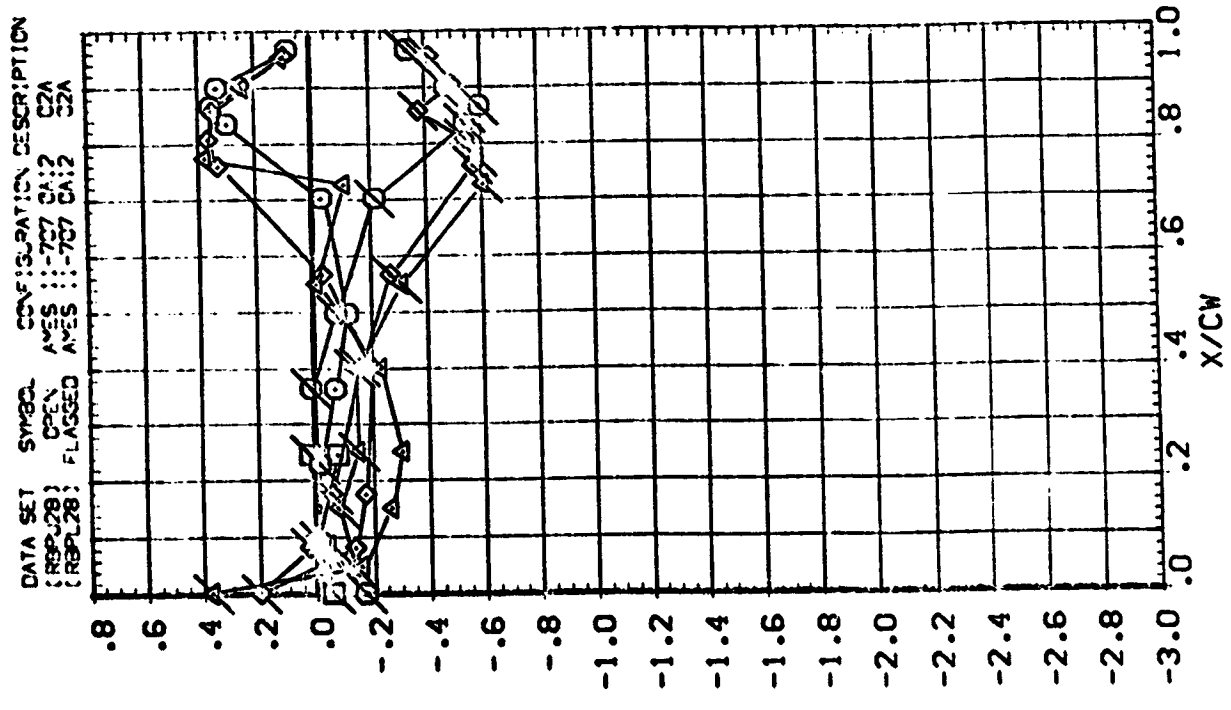


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA .000
 ELEV -20.000
 RUDDER .000
 RUFLR .000

SYMBOL Y/BV BETA MACH
 .299 8.290 .597
 .364
 .427
 .534

UPPER WING
 LOWER WING

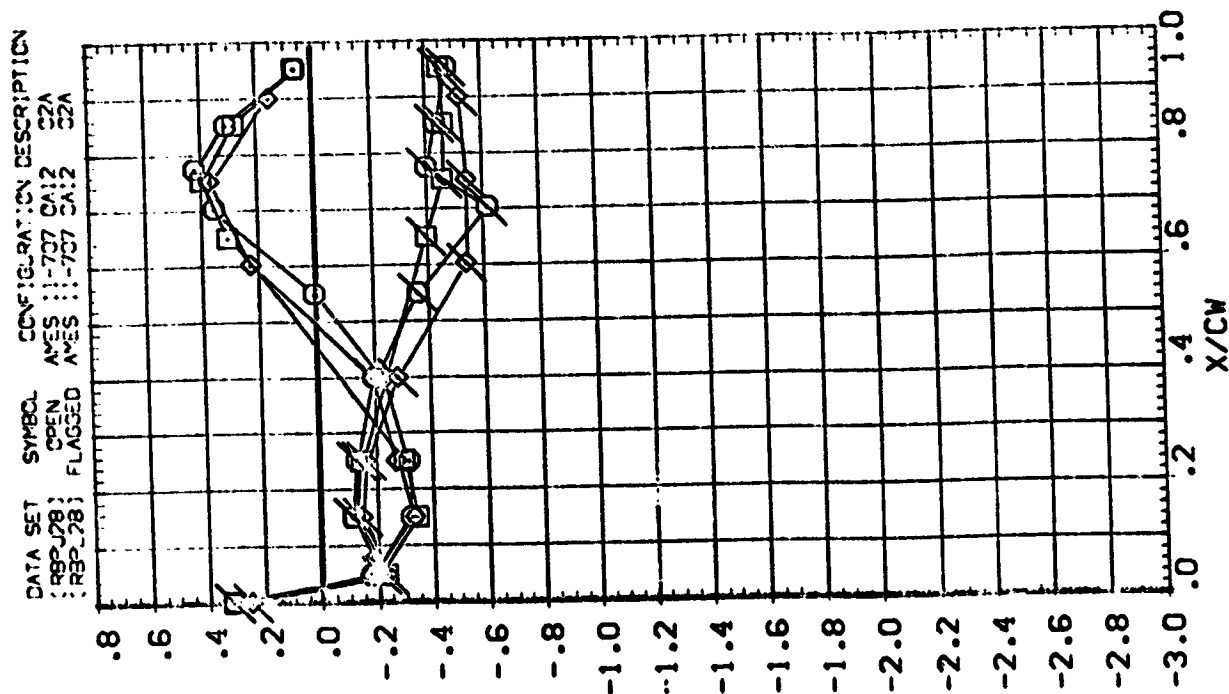


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

ALBANY
ELEVEN

SV982	V/34	BETA	MACH
0110	.673	8.290	.597
0110	.780		
0110	.897		

UPPER VIN
LOWER VIN



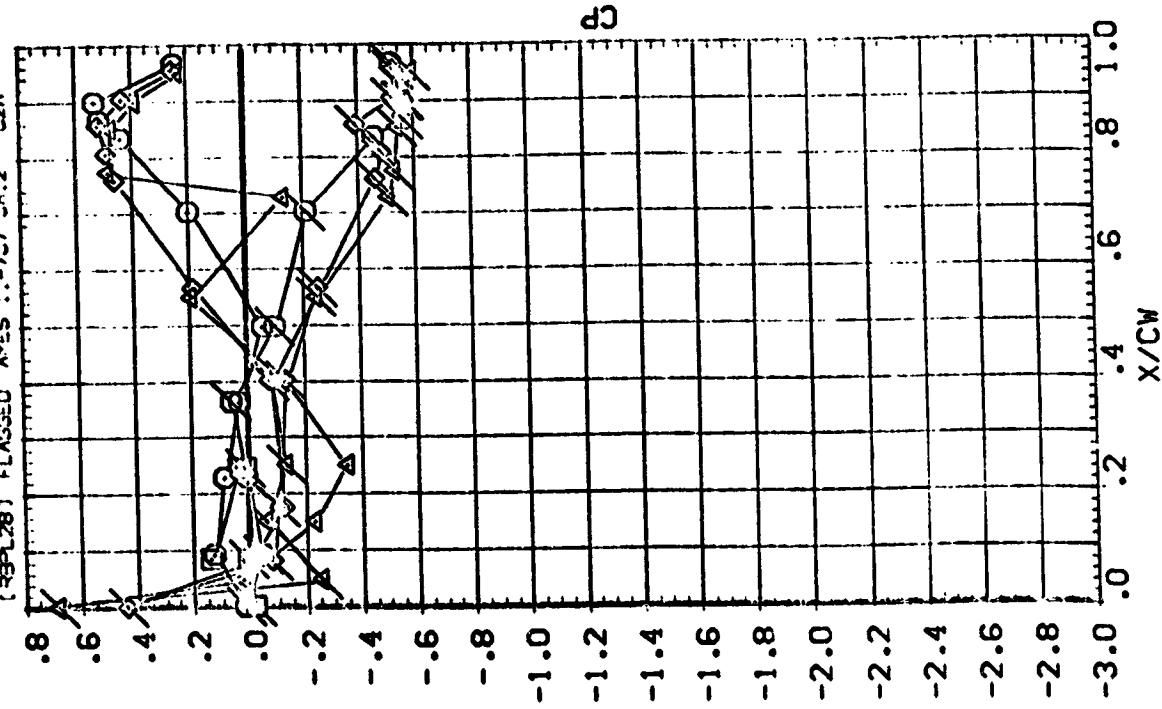
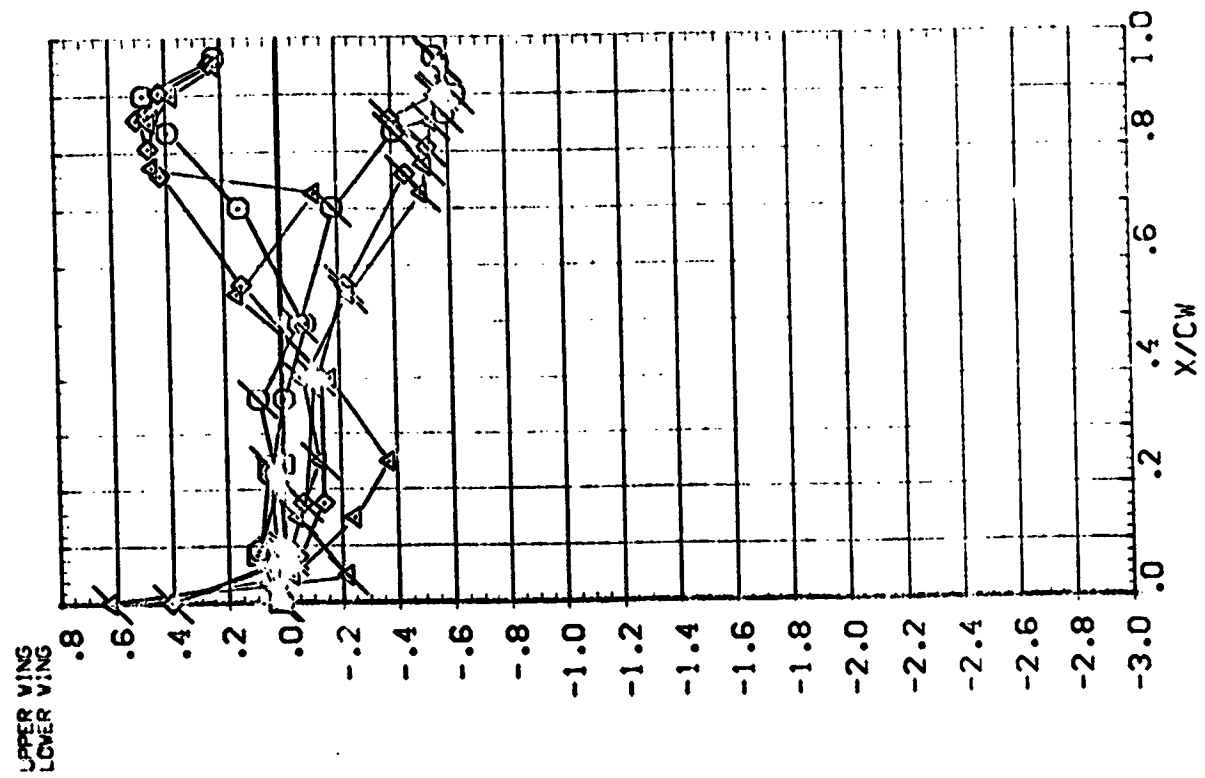
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES



SYMBOL Y/B₁ BETA MACH
 O .299 -8.080 .900
 □ .364 -4.000
 △ .427
 ▲ .534

PARAMETRIC VALUES
 ALPHA .000
 ELEVON -20.000
 RUDDER .000
 RUFLER .000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [BBP-28] OPEN AYES 11-757 CA:2 02A
 [RSP-28] FLAGGED AYES 11-757 CA:3 02A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES

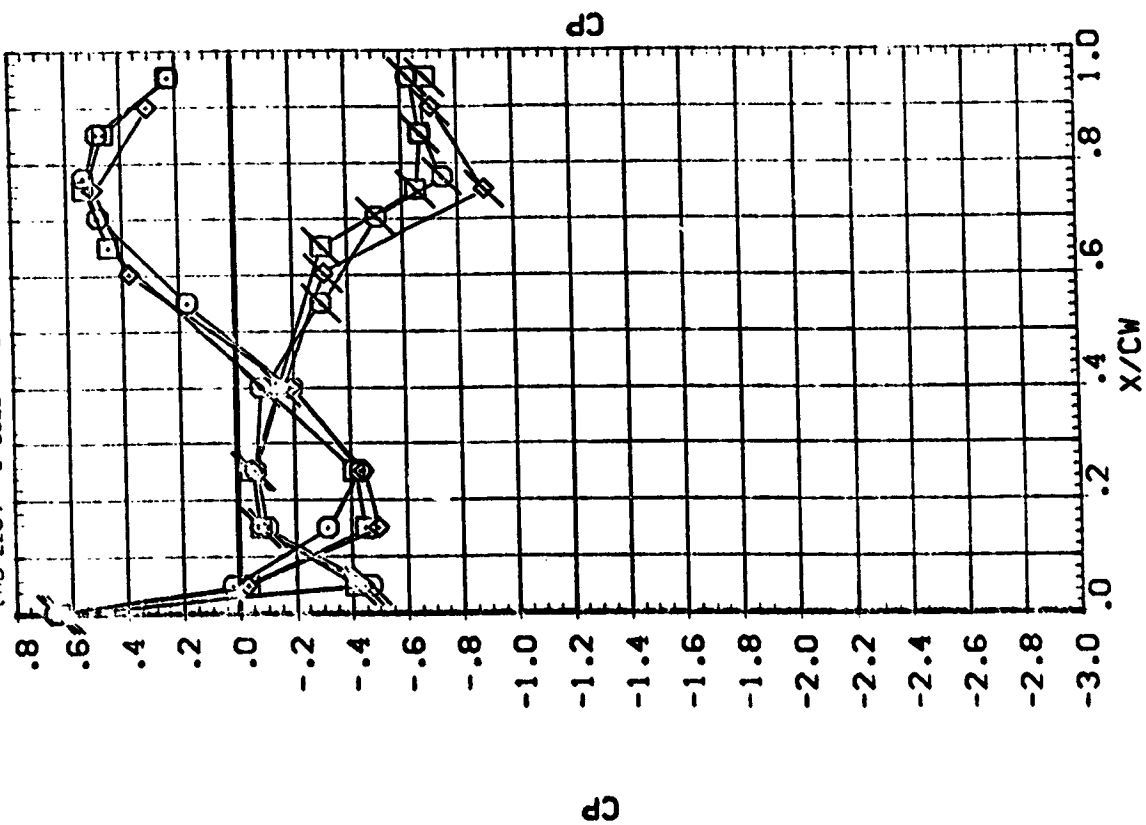
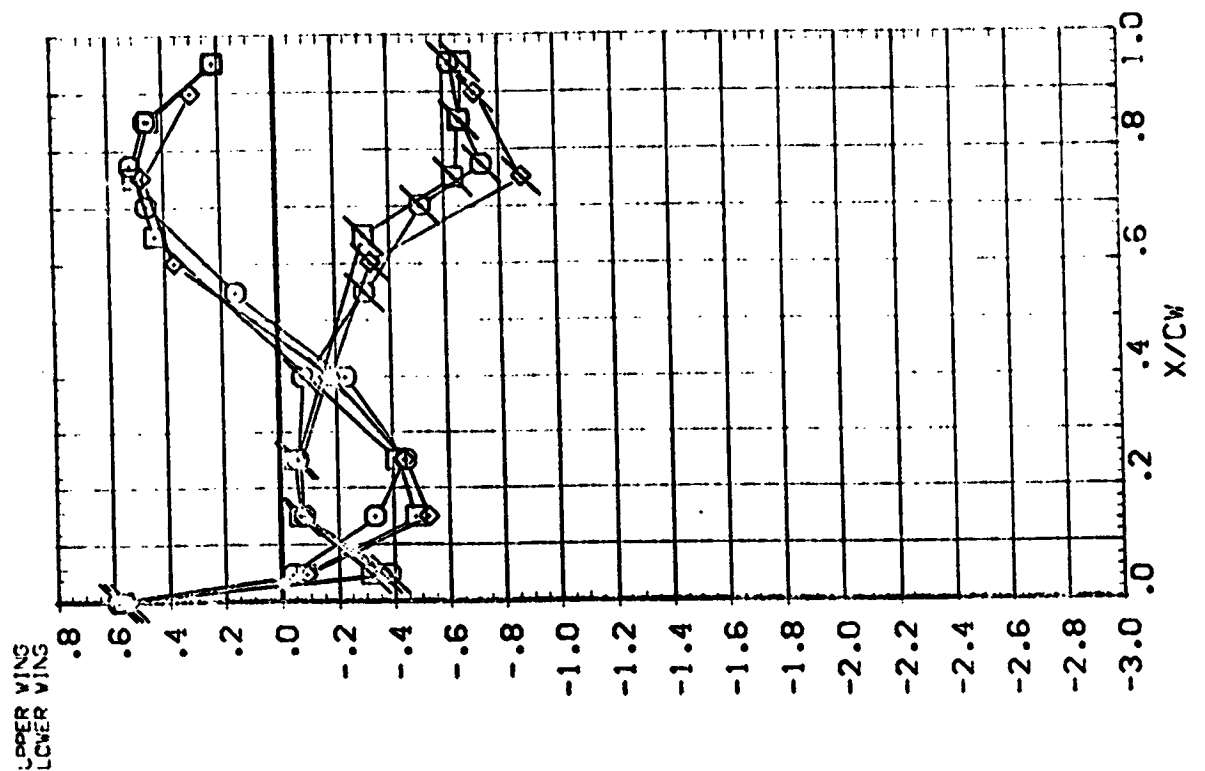
ALPHA	0.000	0.000
ELEVON	0.000	0.000
RUDDER	0.000	0.000

SYMBOL V/BV BETA MACH

.573	-8.080	.900
.780	-4.000	
.887		

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RBPJ28)	OPEN	AMES 11-707 CA:2	CA:2
(RBPJ28)	FLAGGED	AMES 11-707 CA:2	CA:2

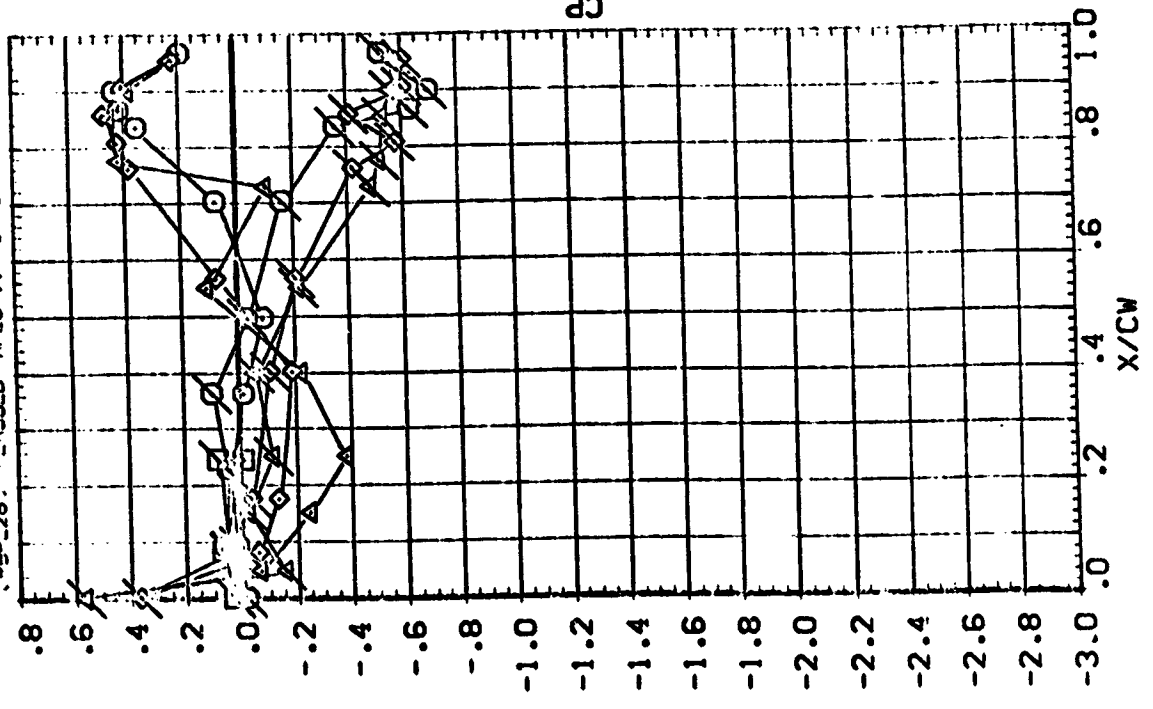
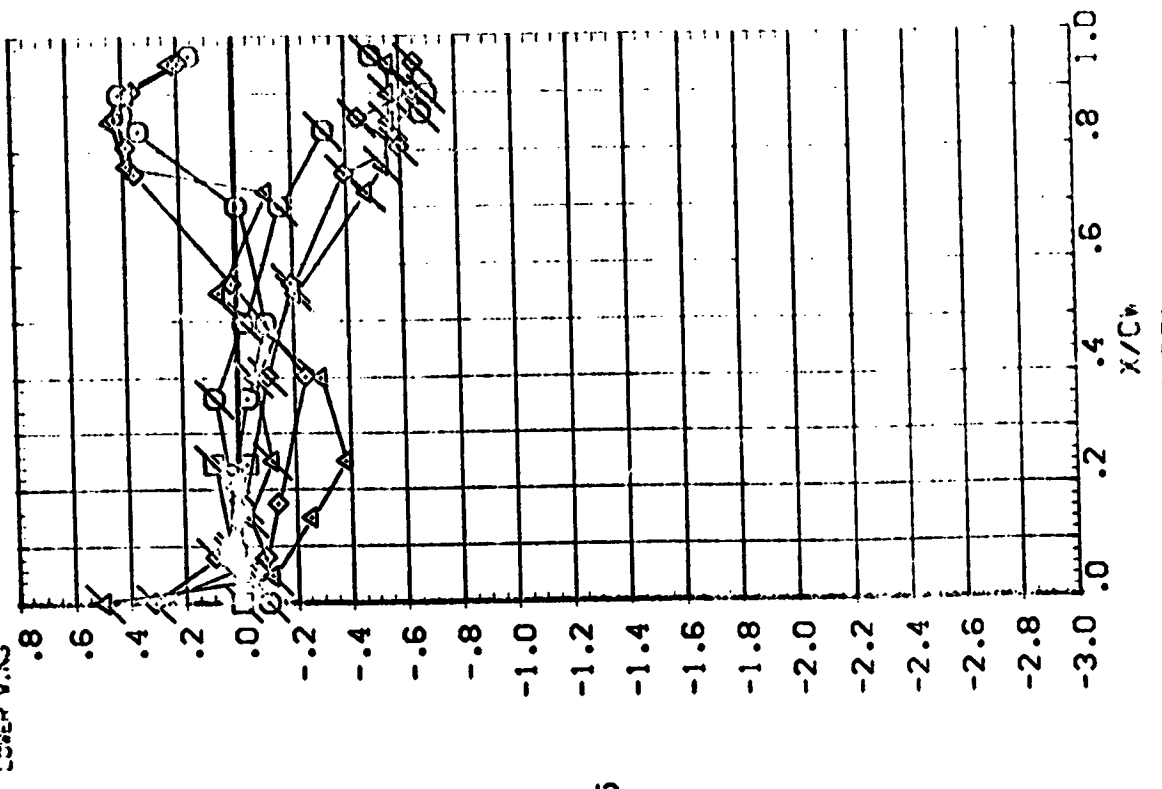


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA .000
 ELEVON .000
 RUDER .000
 -20.000 20.000

SYNCH. Y/BV .299
 .364
 .477
 .534
 BETA .080
 4.240
 MACH .900

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 :REP-28: OPEN AMES 11-707 CA12 C2A
 :REP-28: FLAGGED AMES 11-707 CA12 C2A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 .000 3.0000
 .000 3.0000
 .000 3.0000
 .000 3.0000

ALPHA
 ELEVATION

MAC

BETA

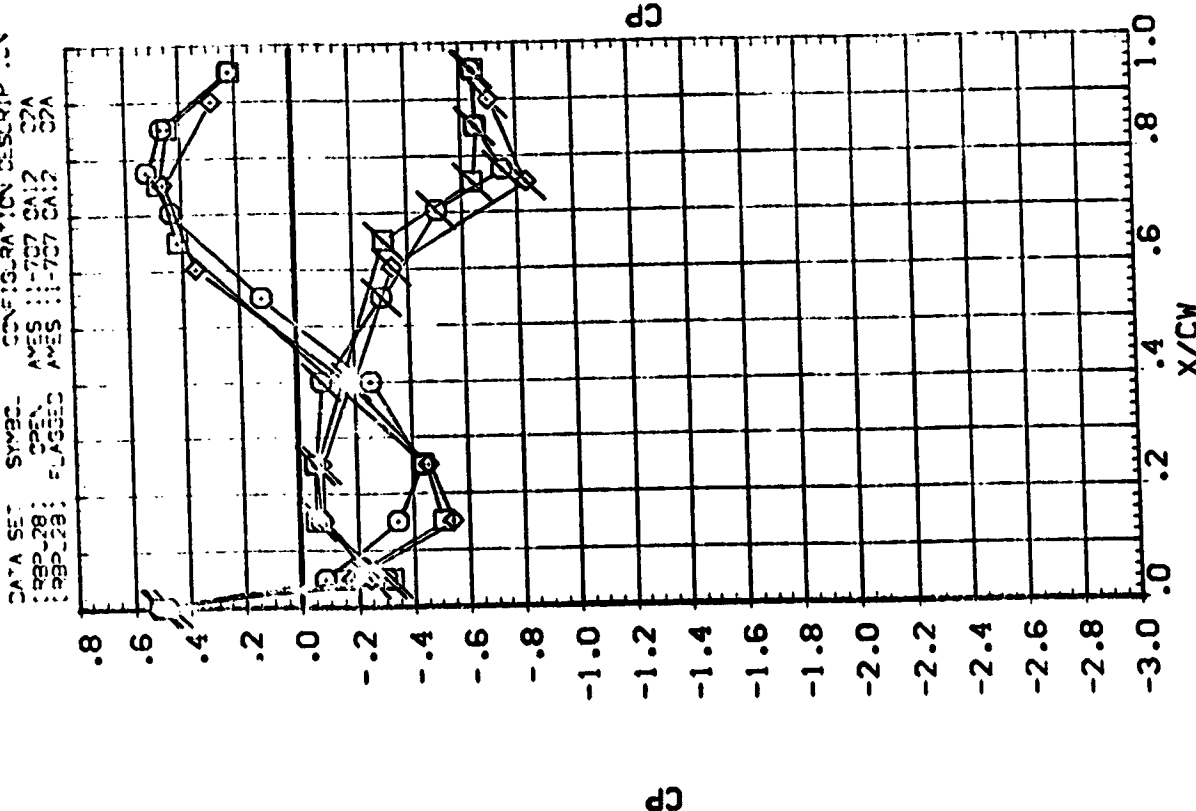
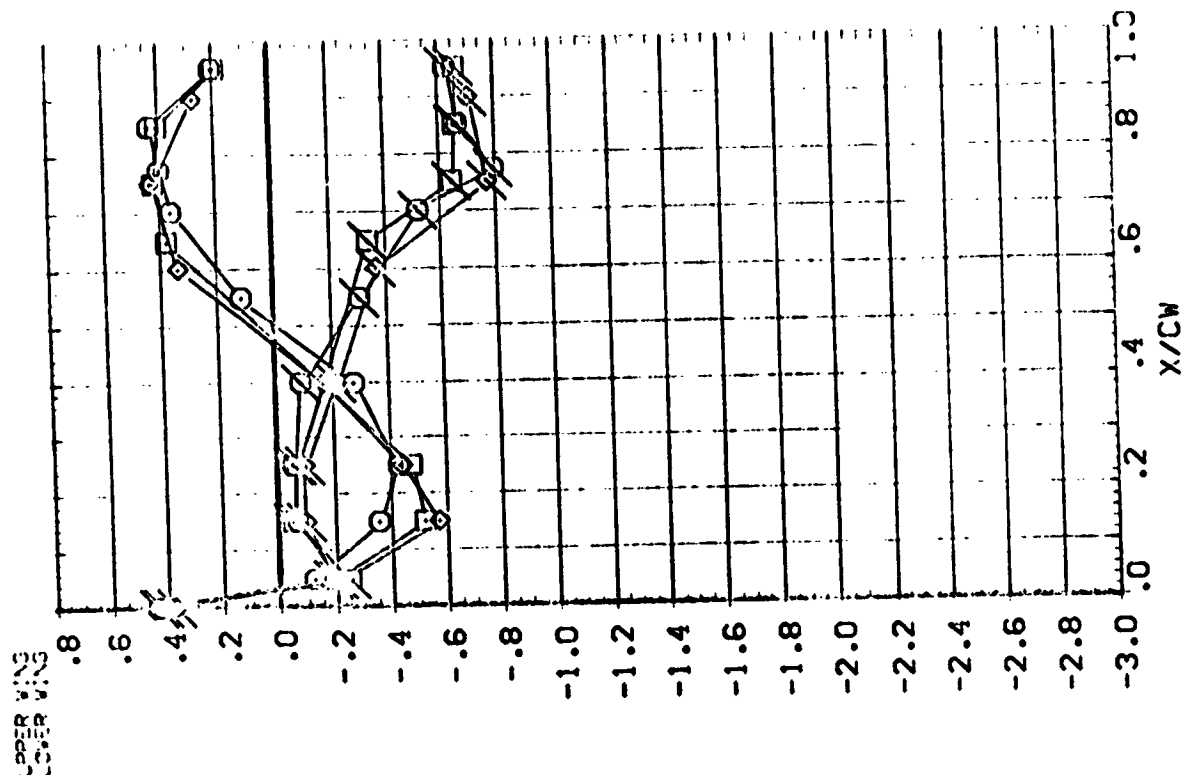
Y/B

SV32

DATA SET SW32 CONFIGURATION DESCRIPTION

899.28 0281 AXES 11-707 CAL2 C2A

899.28 0281 AXES 11-707 CAL2 C2A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETER VALUES

ALPHA
ELEVEN

Case: 1:11-cv-00001-UNA Document 1-1 Filed 02/02/12 Page 1 of 1

8.43
3E-A

9/8/4

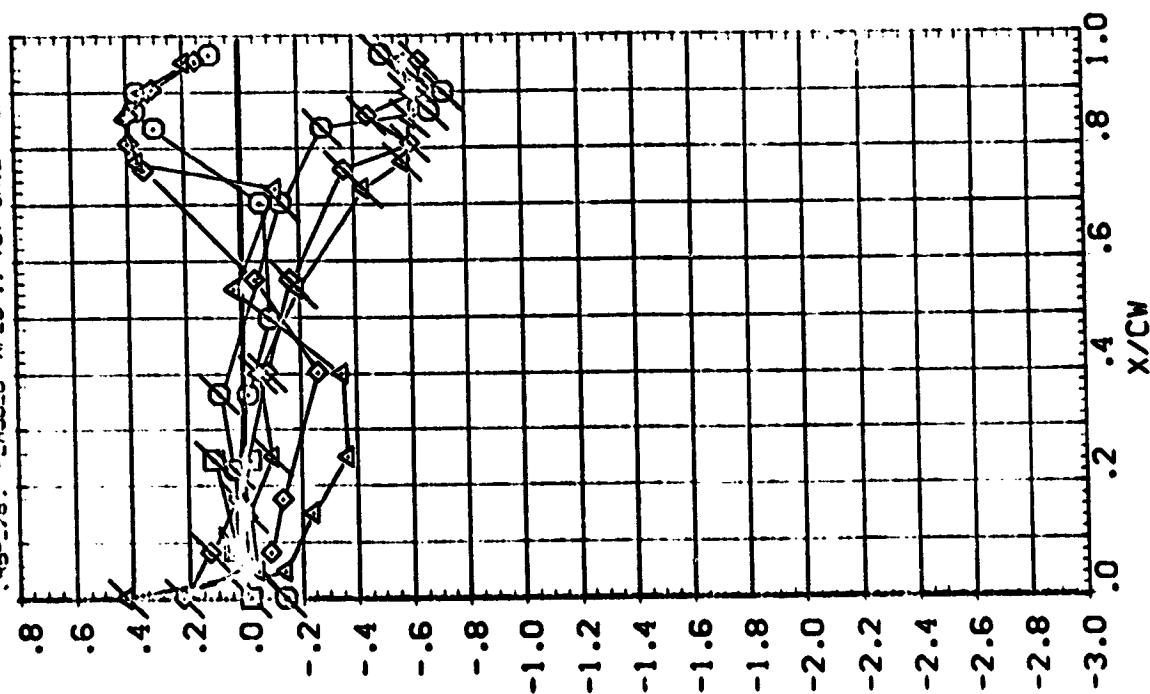
U
-JENIS

1

1

6:22
6:23

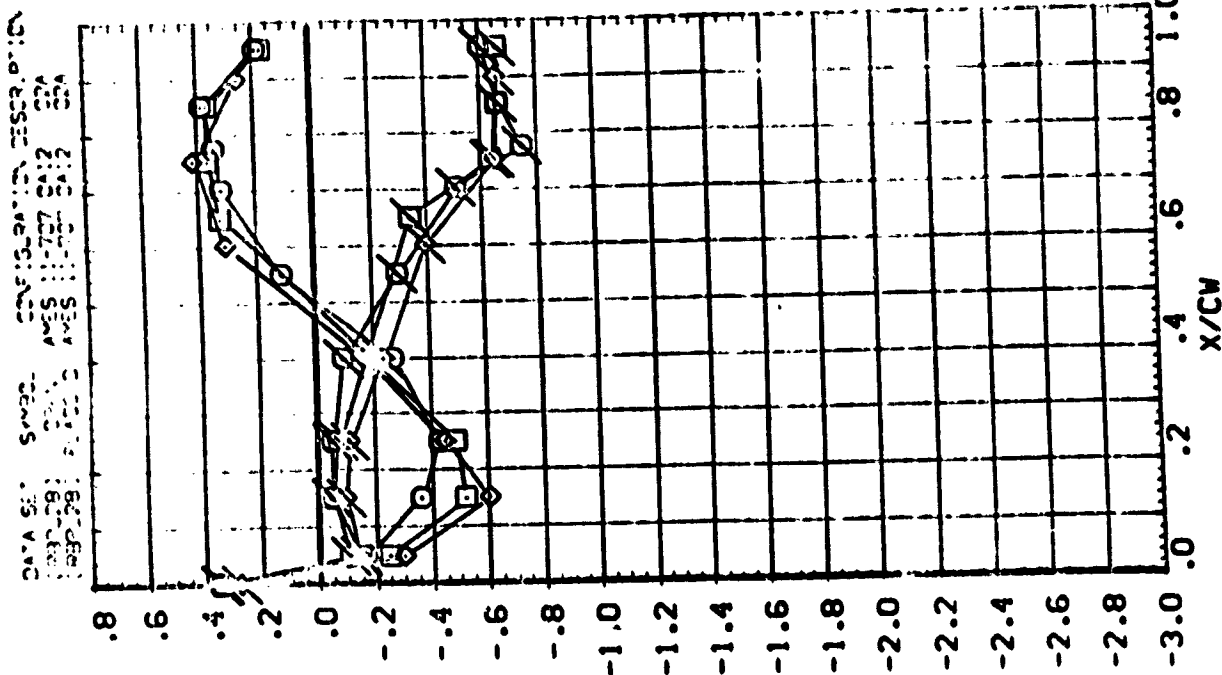
DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
: 393-28:	CPEN	AMES 11-707 CA12 C2A
: 393-28:	ASSEN	AMES 11-707 CA12 C2A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA .000
 BETA .000
 GAMMA .000
 DELTA .000
 EPSILON .000

UPPER WING
 LOWER WING



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

SYNCH
O
I
◇

V/3
.673
.780
.897

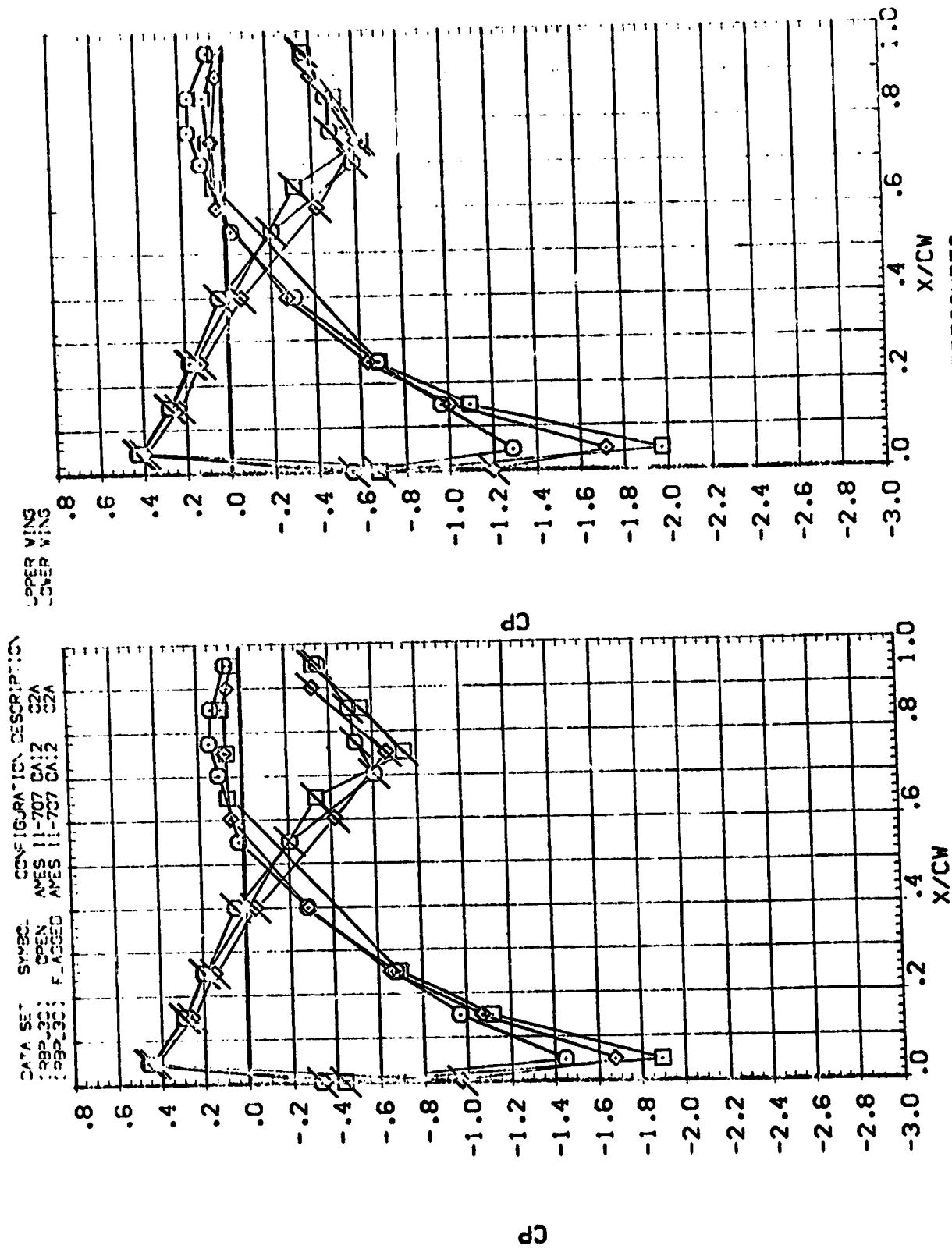
BETA
-8.050
-3.990

MACH
.598

ALPHA
ELEVON

PASIVETIC VALUES
10.000
-20.000
9.000

DATA SET SYNCH CONFIGURATION DESCRIPTION
:RBP-30: OPEN AVES 11-707 CA:2 C2A
:RBP-30: F-AGED AVES 11-707 CA:2 C2A



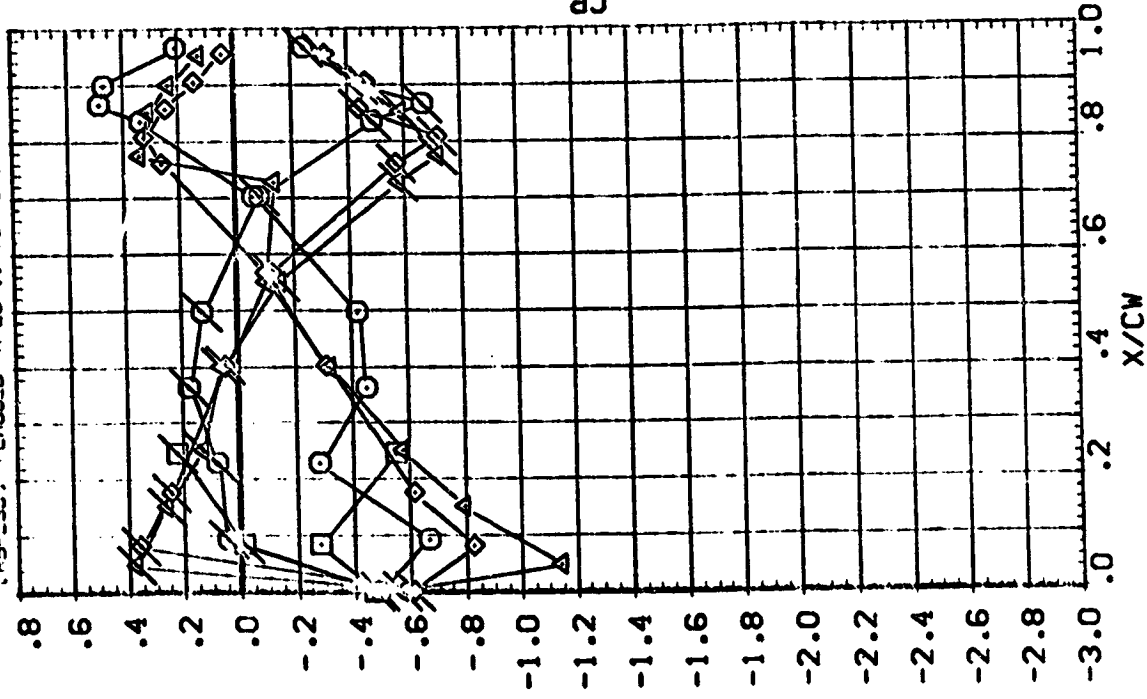
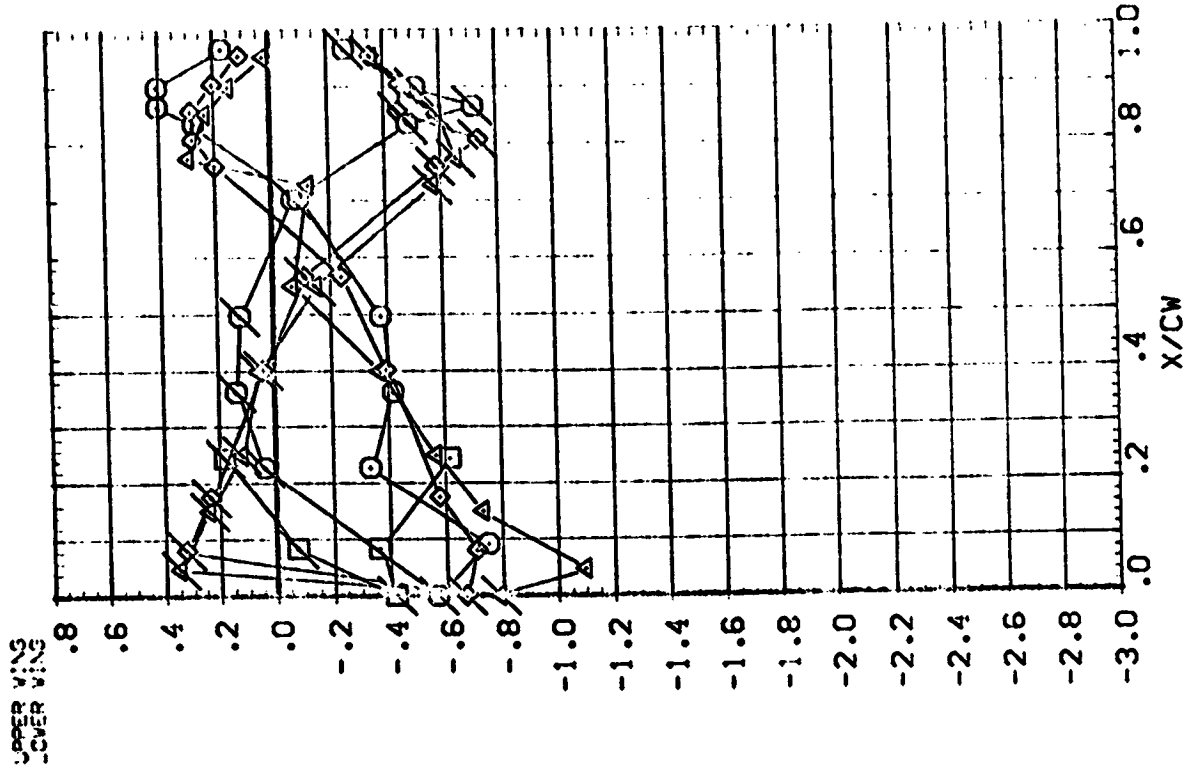
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES



PARAMETER VALUES
 ALPHA 10.000
 ELEVON -20.000
 RUBBER
 RUBBER

SYMBOL Y/BV BETA MACH
 .299 .080 .598
 .264 4.15C
 .427
 .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 :PBP_30: OPEN AMES 11-707 OA12 O2A
 :PBP_30: FLASSED AMES 11-707 OA12 O2A

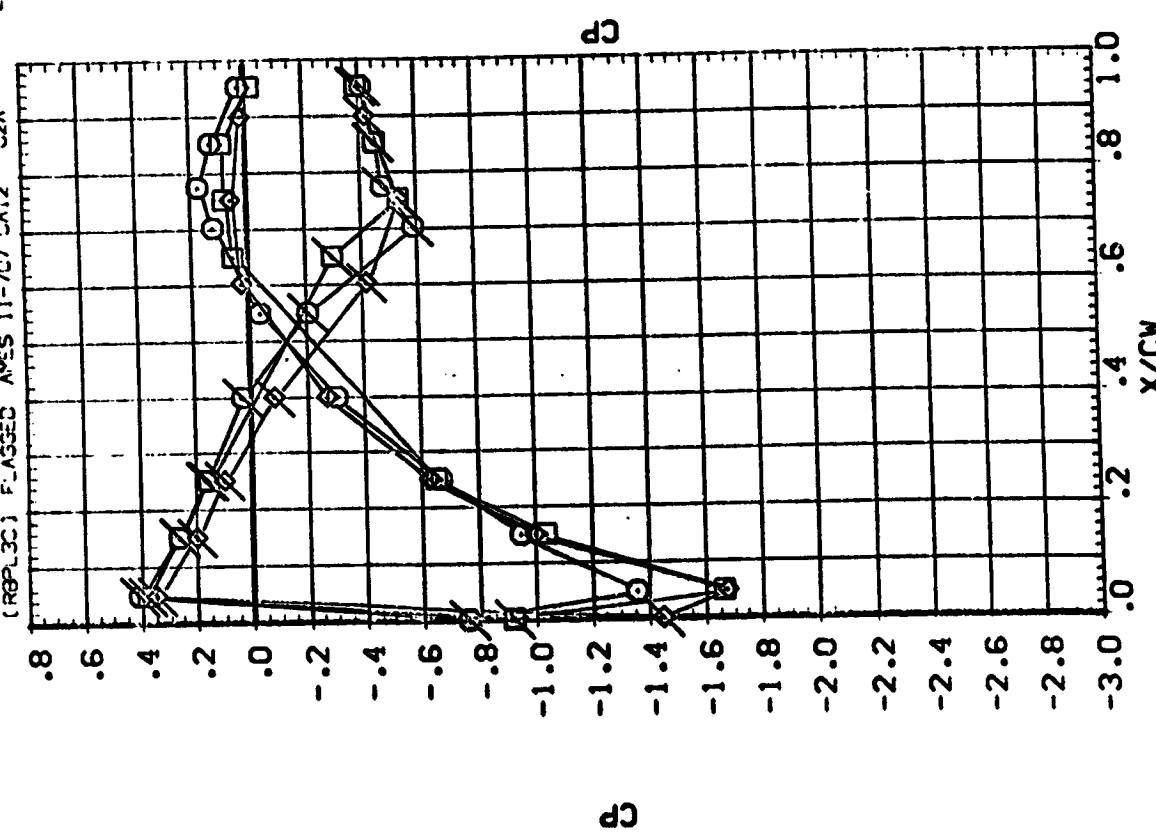


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

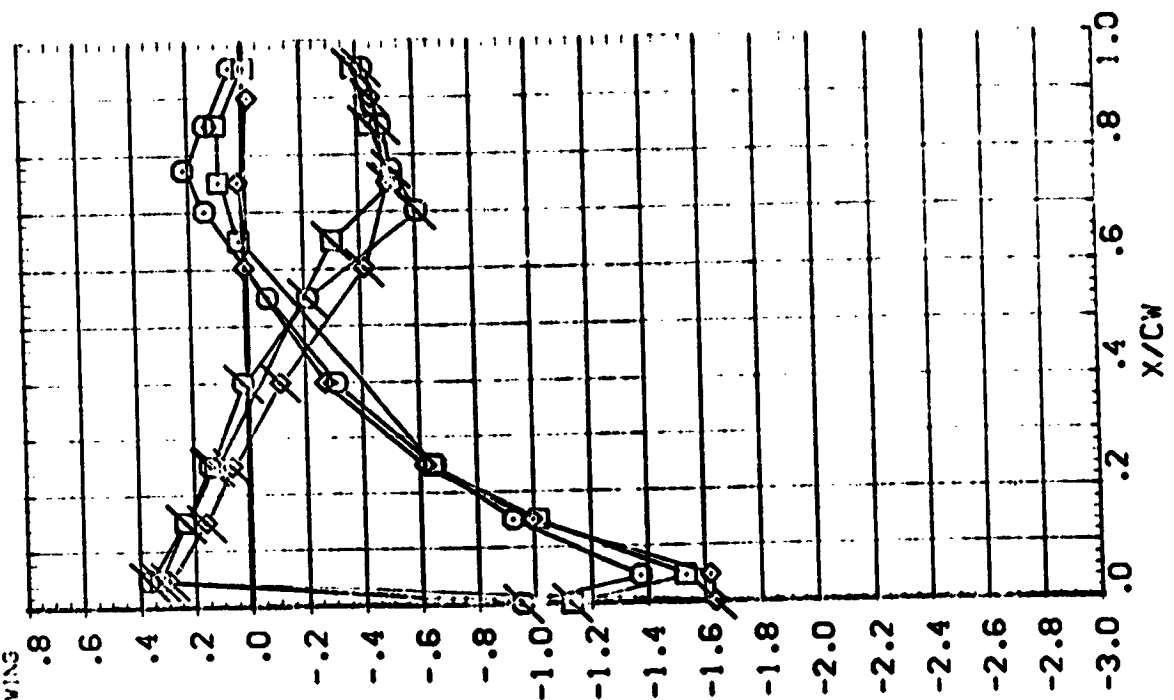
ALPH A 10.000 R.000
 ELEV N -20.000 R.000

SYMBO. V/BV BETA MACH
 .673 .080 .598
 .780 4.150
 .887

DATA SET SYMBO. CONFIGURATION DESCRIPTION
 (RBPJ3C) OPEN AVES 11-707 CA12 Q2A
 (RBPJ3C) FLASSED AVES 11-707 CA12 Q2A



UPPER WING
 LOWER WING



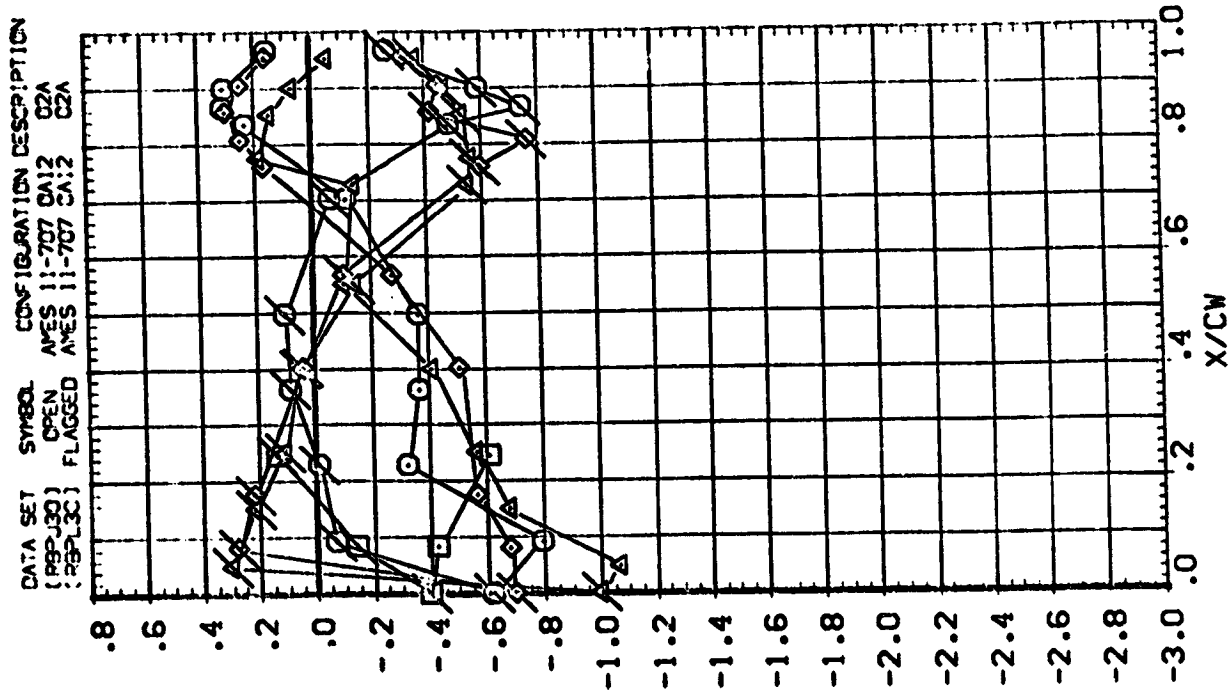
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES



SYMBOL Y/BN BETA MACH
○ .289 8.230 .598
□ .364
◇ .427
△ .534

PARAMETRIC VALUES
ALPHA .000
ELEVON .000
RUDDER .000
RUFLER .000

UPPER WING
LOWER WING



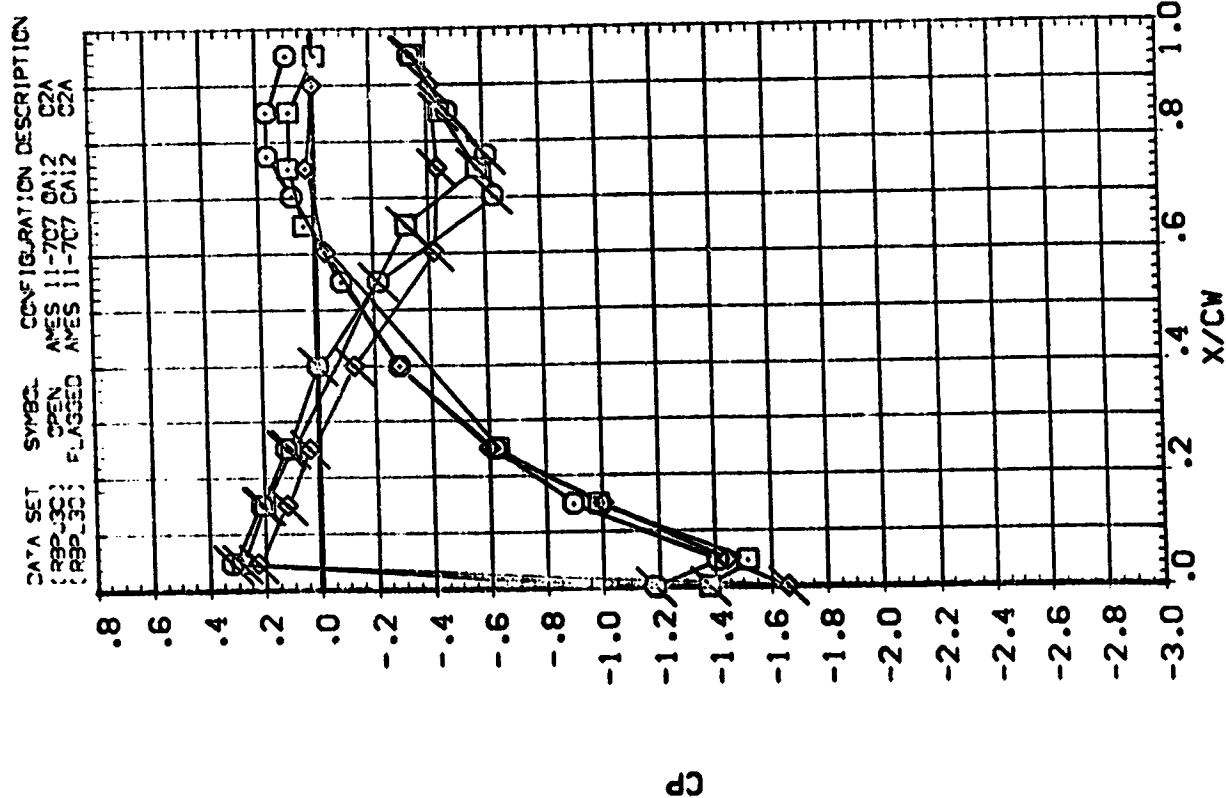
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 10.000 RUDDER
 -20.000 RUDDER

ALPHA
 ELEVON

SYMBOL Y/BV BETA MACH
 .573 8.230 .598
 .78C
 .887

UPPER WING
 LOWER WING



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

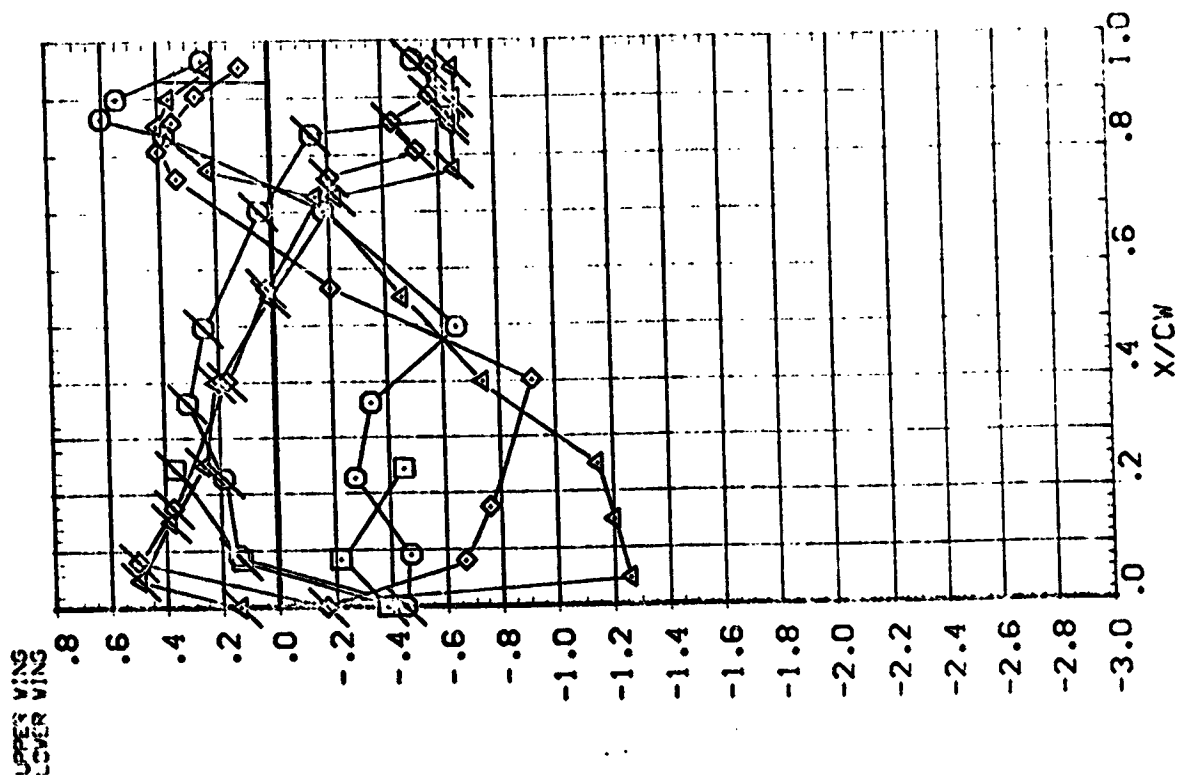
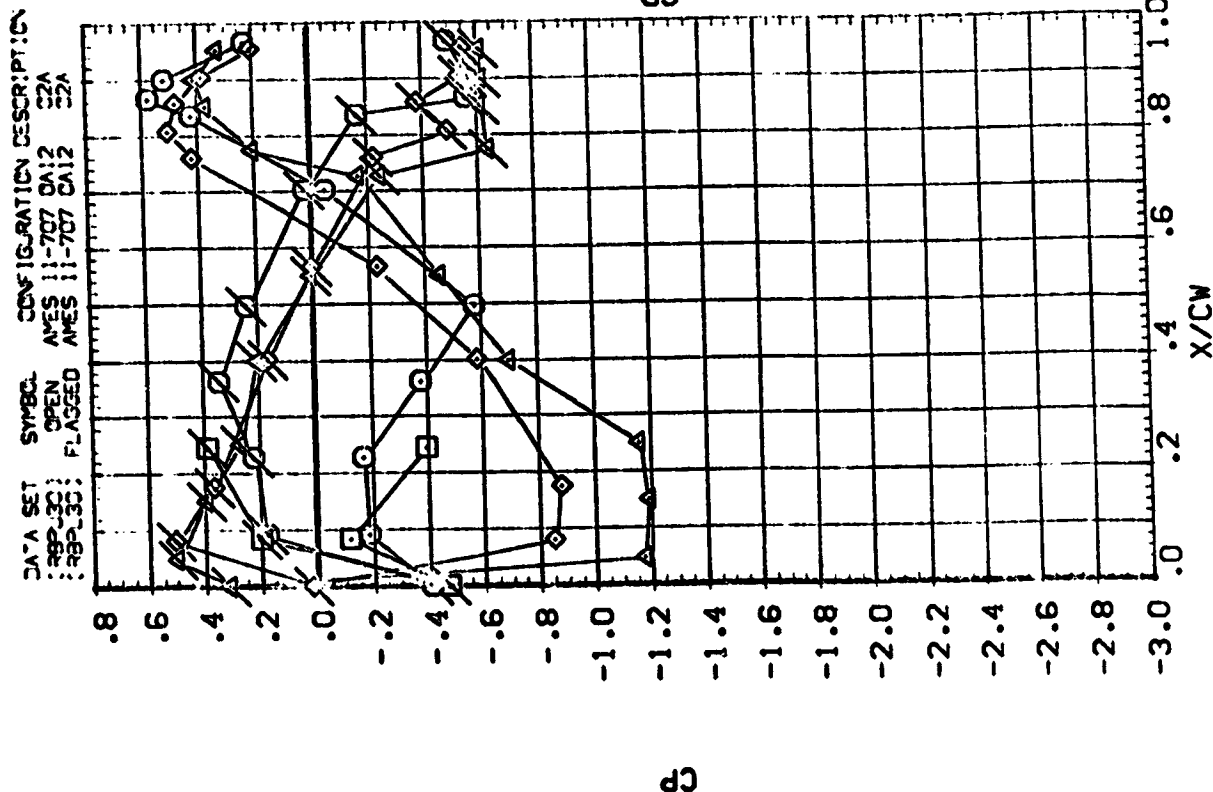


SYMBOL
 V/BV
 .299
 .364
 .427
 .534

BETA
 -8.160
 -4.040

MACH
 .901

PARAMETRIC VALUES
 ALPHA
 ELEVON
 10.000
 -20.000
 RUDDER
 .000
 RUDDER
 .000



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES



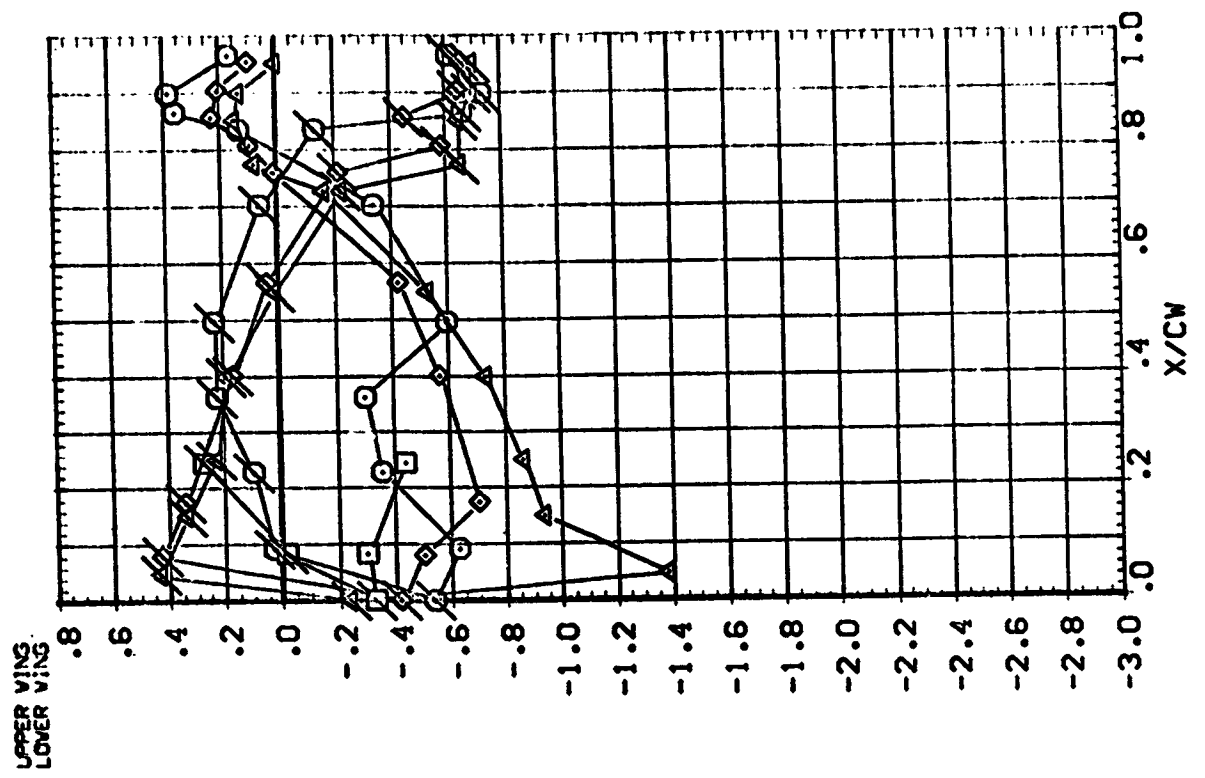
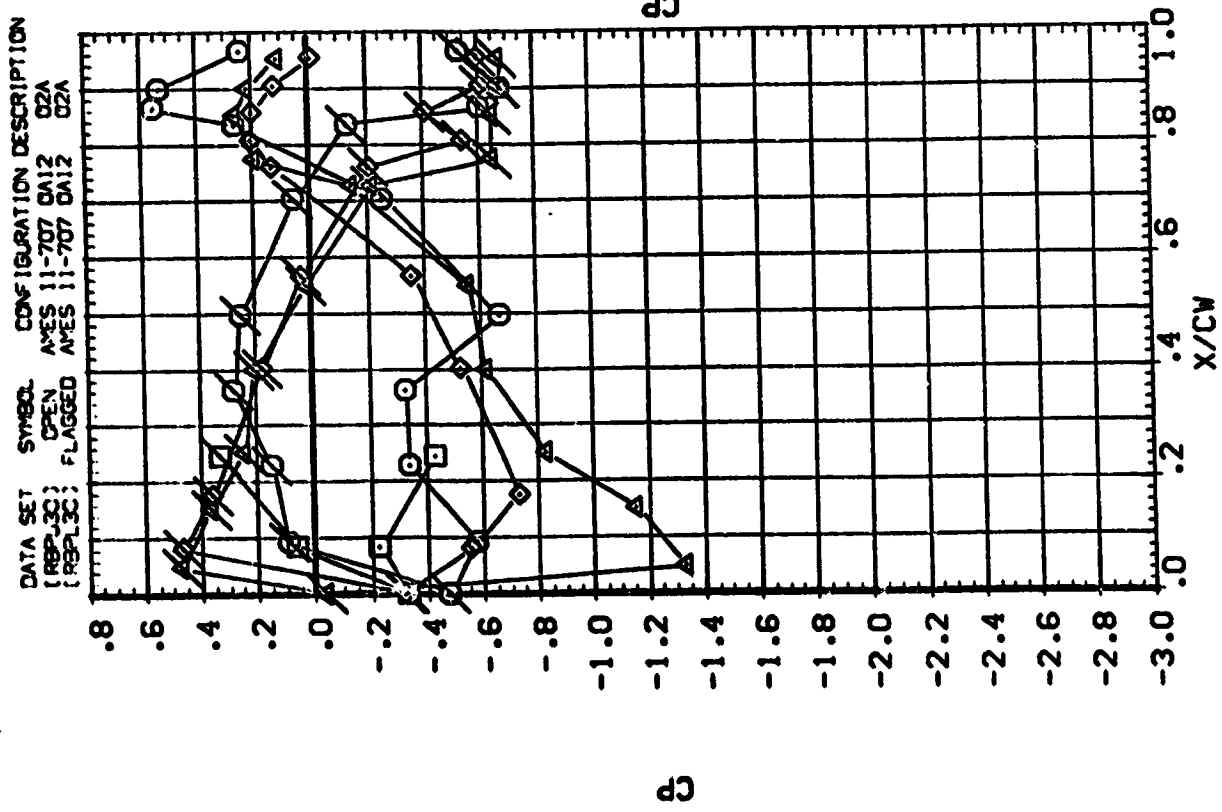
SYMBOL
○ □ ◇ △

Y/BU
.298
.364
.427
.534

BETA
.080
4.190

MACH
.901

PARAMETRIC VALUES
ALPHA
ELEVON
10.000
-20.000
RUDDER
RUFLR

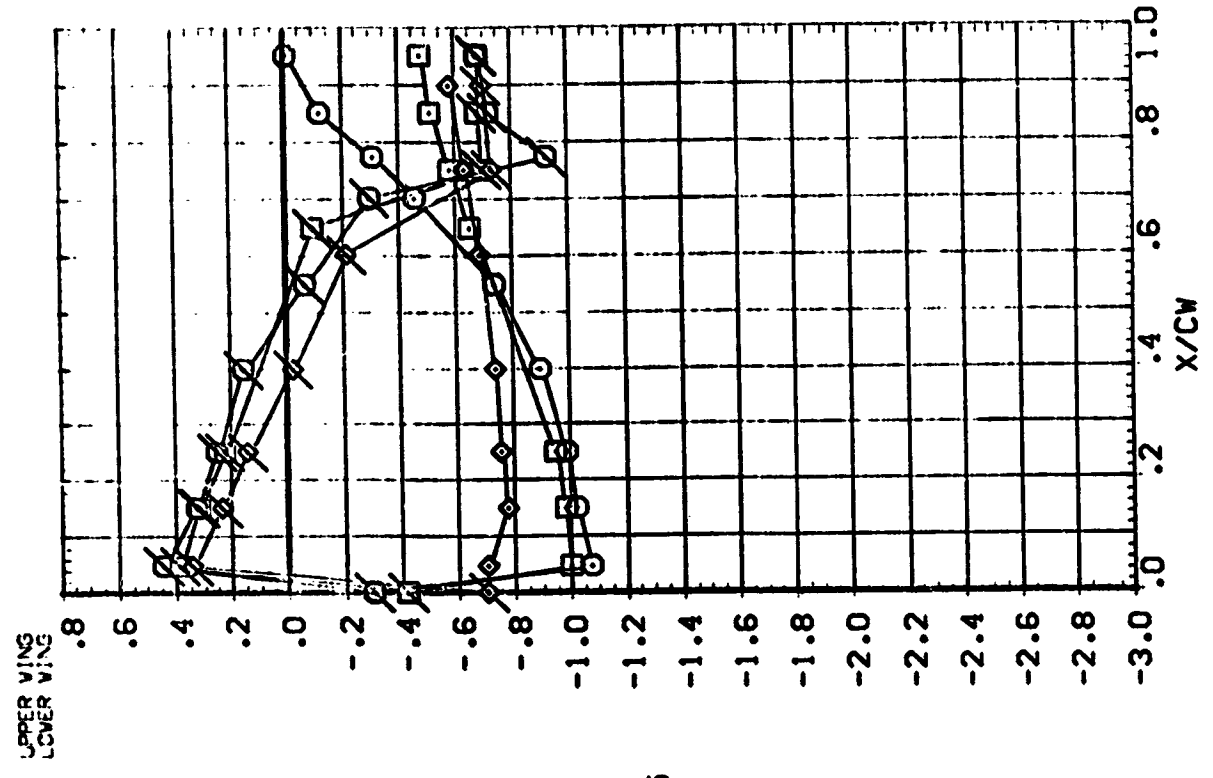
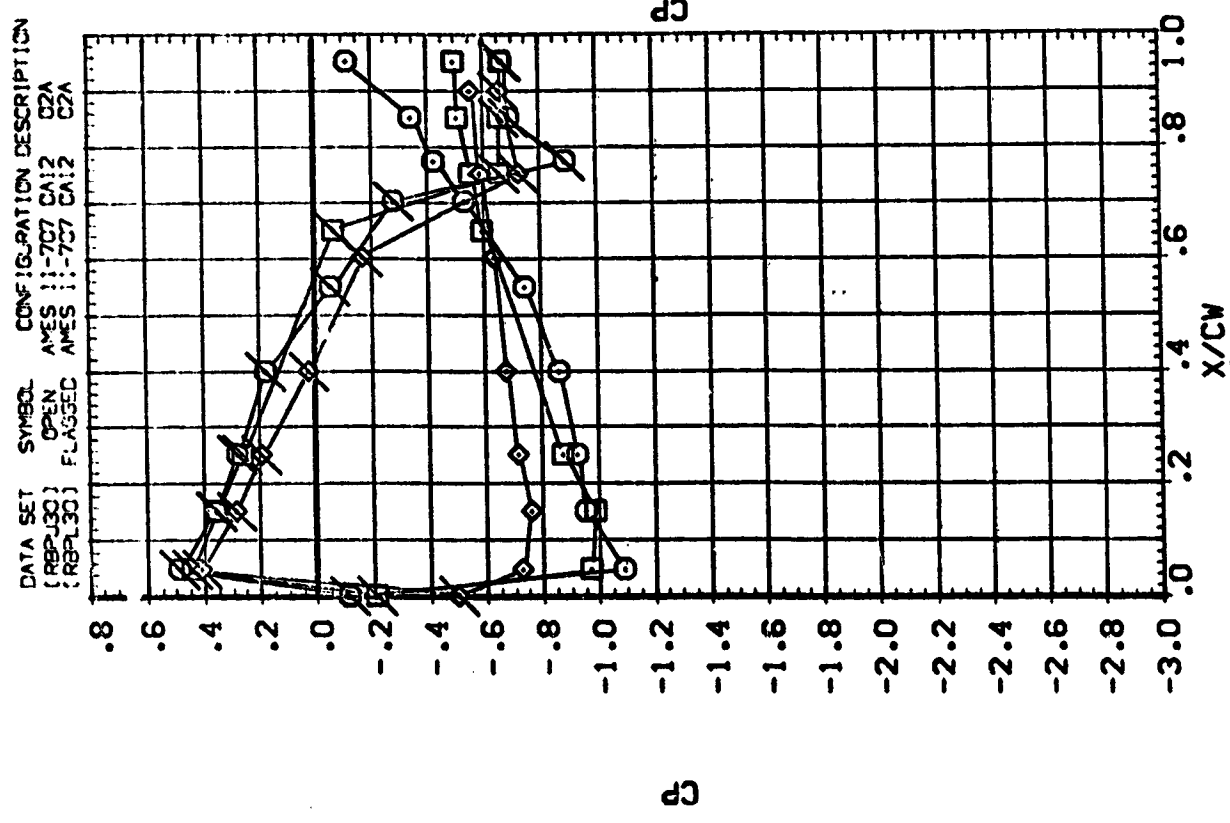


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

ALPHA
 ELEVON
 10.000
 9.000
 9.000

SYMBOL Y/5V BETA MACH
 .573 .080 .901
 .780 4.190
 .887

DATA SET VALUES
 10.000
 9.000
 9.000



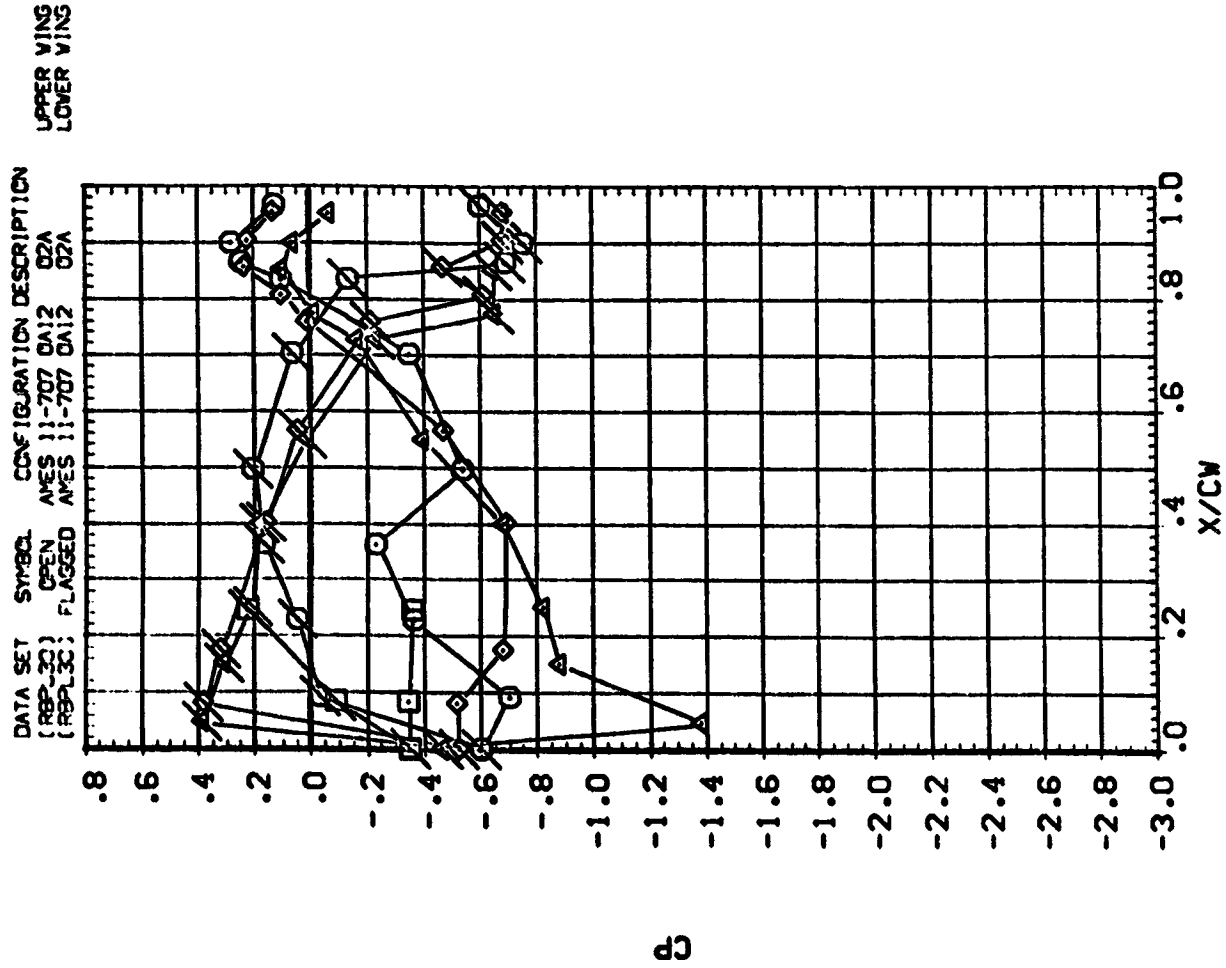
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES



SYMBOL Y/BN
 □ .299
 ◇ .364
 △ .427
 △ .534

BETA MACH
 8.320 .901

PARAMETRIC VALUES
 ALPHA 10.000 RUDDER
 ELEVON -29.000 RUDFLR



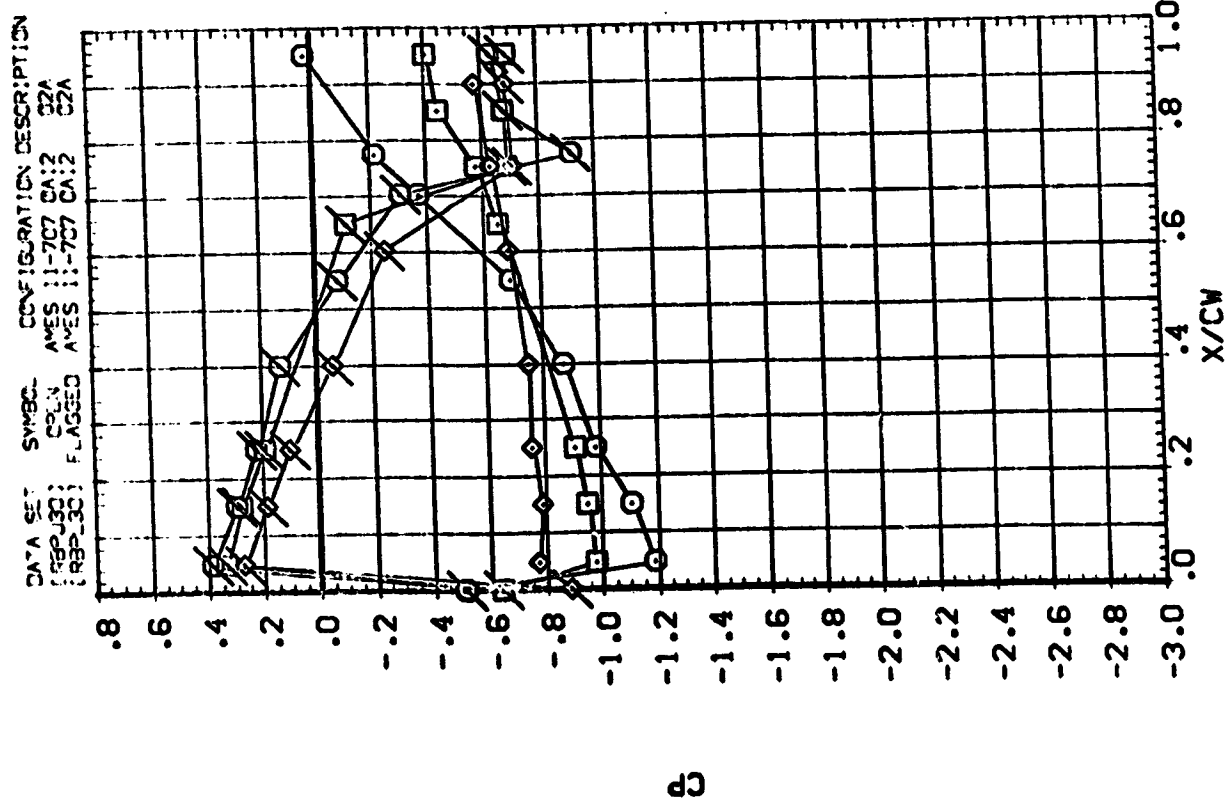
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA 10.000
 ELEVON -20.000

ALPHA
 ELEVON

SYNTH V/BM .673
 .78C
 .887
 BETA 8.320
 MACH .901

UPPER WING
 LOWER WING



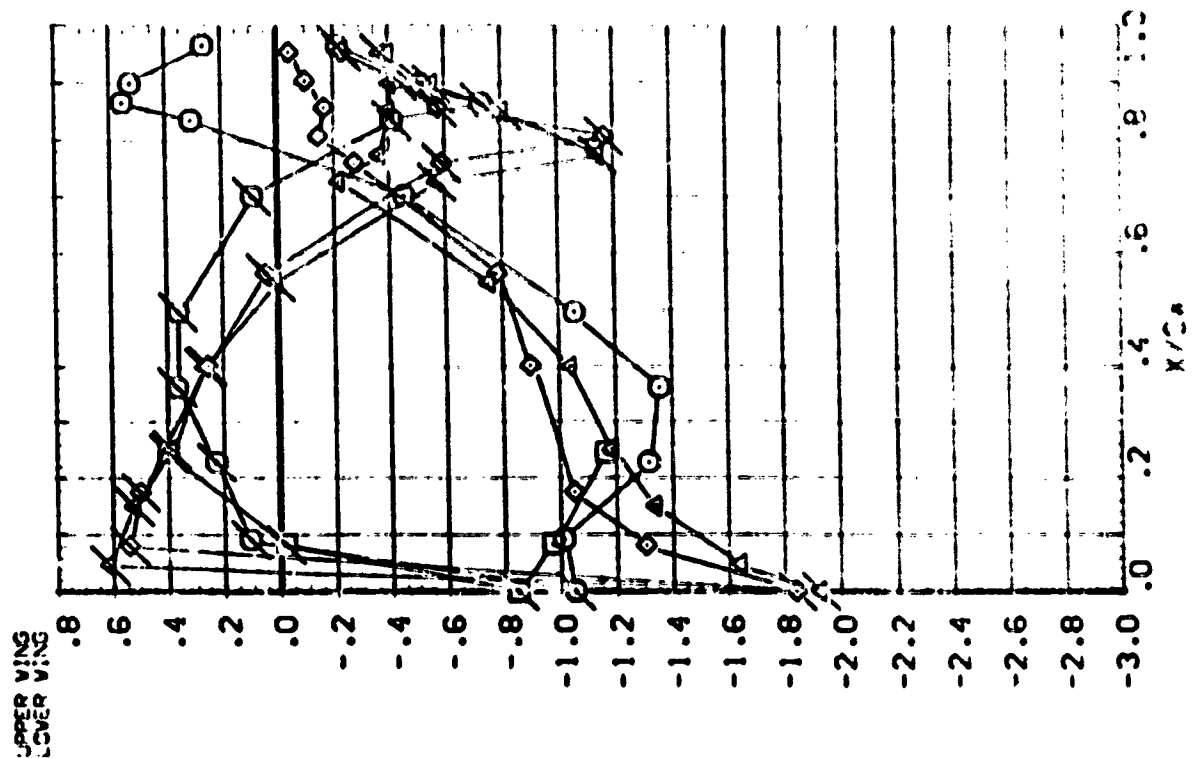
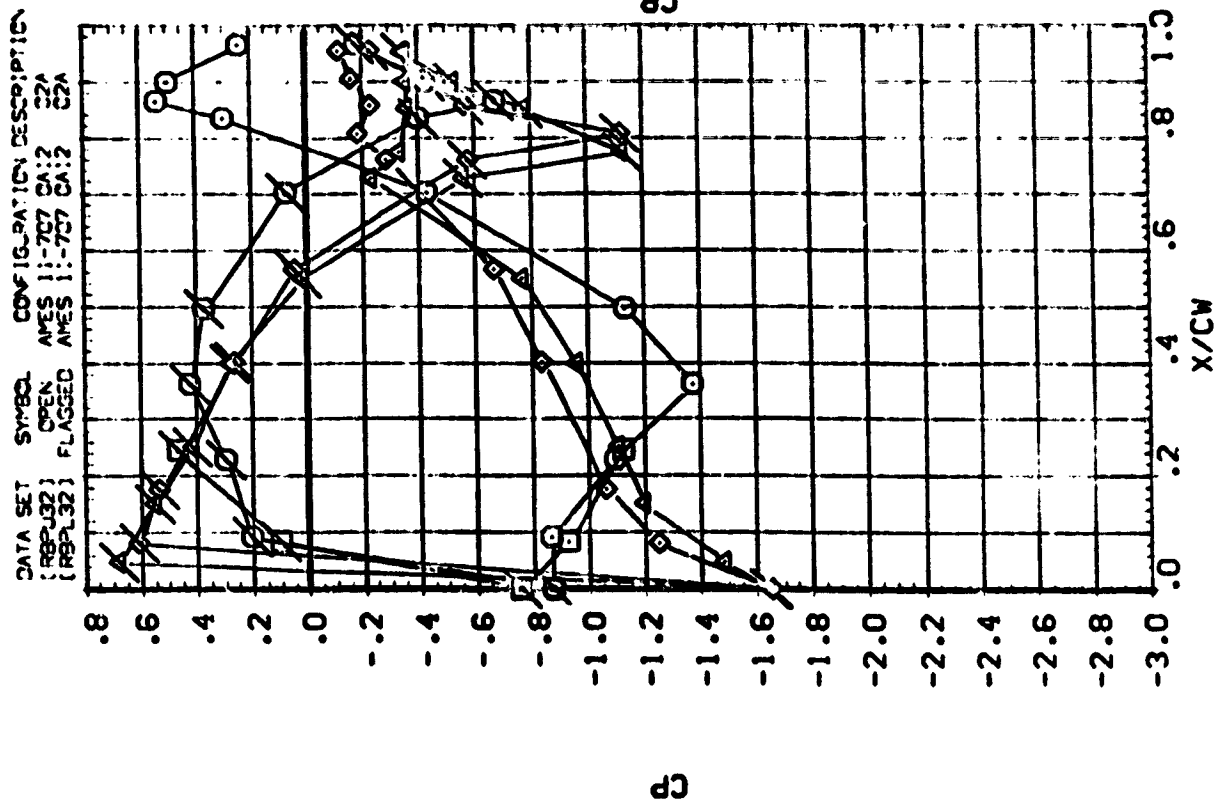
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES



SYMBOL V/BY
 () .298
 [] .364
 < > .427
 Δ .534

BETA MACH
 -7.980 .600
 -3.950

PARAMETER VALUES
 ALPHA 20.000
 ELEVATION -20.000
 RADIUS 2.000
 RADIUS 2.000



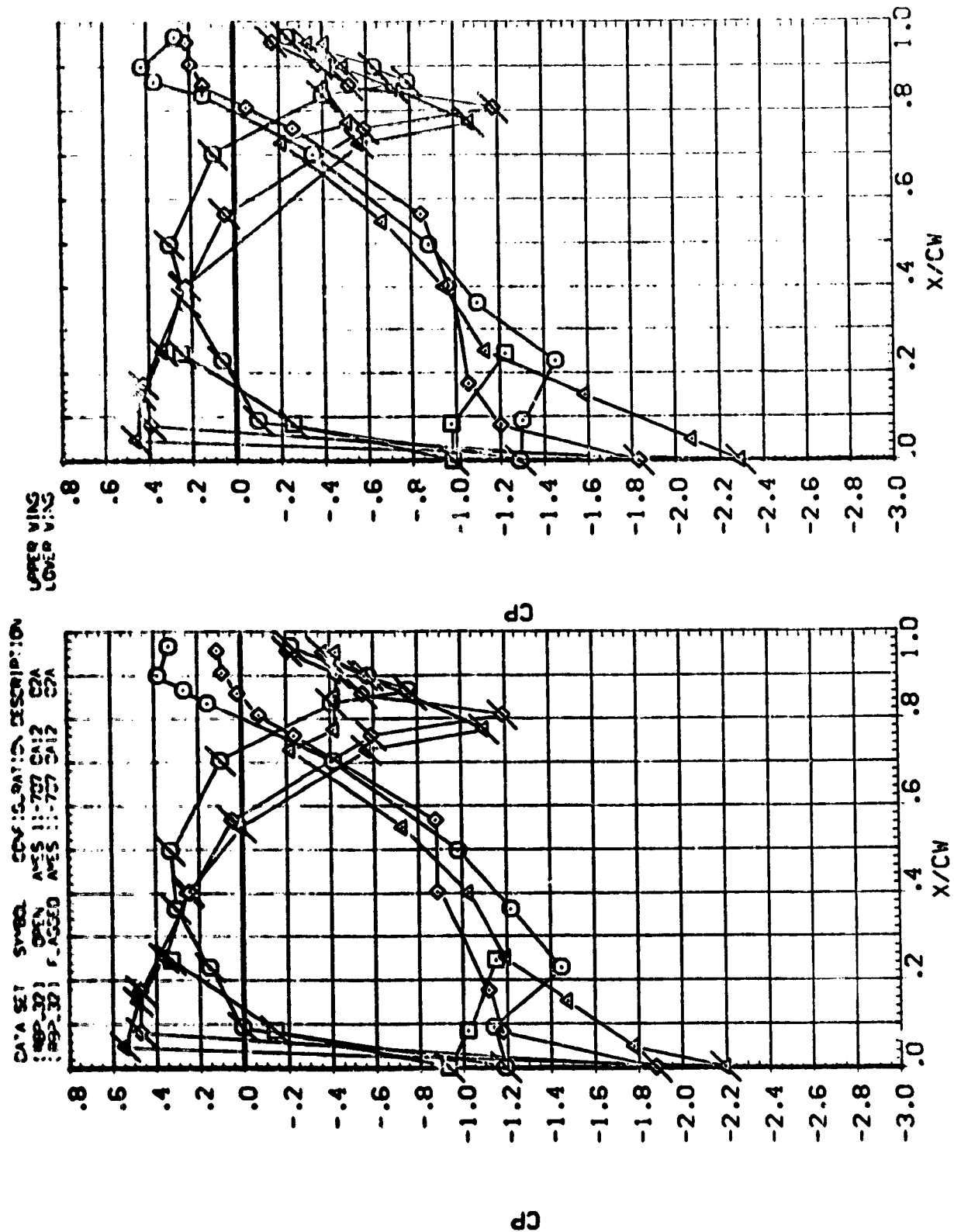
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES



PARAMETRIC VALUES
 ALPHA 20.000
 ELEVON -70.000
 PITCH 0.000
 ROLL 0.000

DATA SET SYMBOL DESCRIPTION
 (880-30) OPEN ASES 11-707 CA12 C2A
 (890-30) F-ASSED ASES 11-707 CA12 C2A

WING 1/30 2/30 3/30 4/30 5/30
 .799 .351 .477 .534

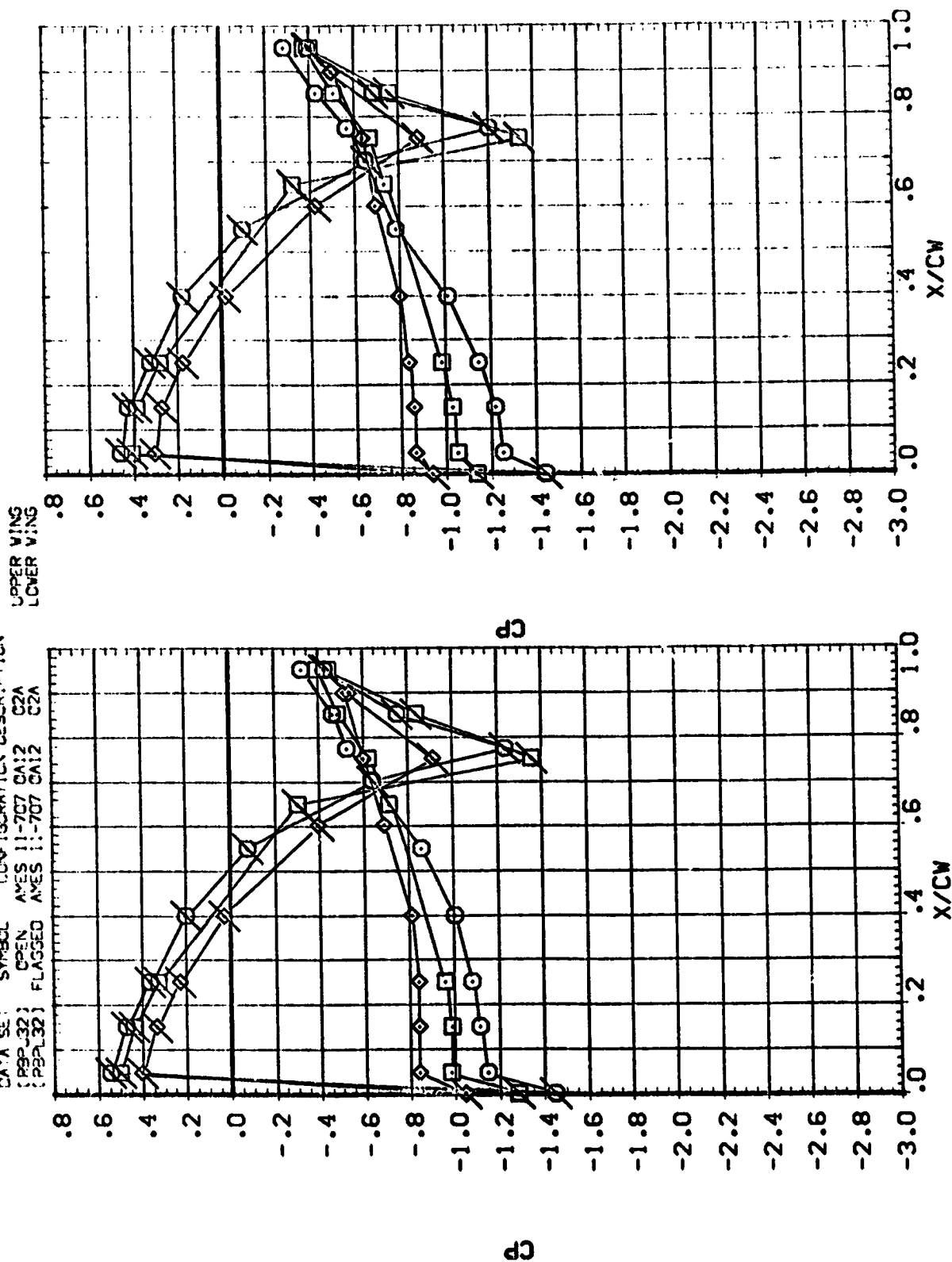


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

DIMENSIONAL VALUES
 ALPHA 20.000 RUBBER 1.000
 ELEVON -20.000 RUBBER 1.000

SYMB: 1/34 BETA .07C MAC .600
 .573 .78C 4.190
 .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (PBP-32) OPEN AMES 11-707 CA12 C2A
 (PBP-32) FLAGGED AMES 11-707 CA12 C2A



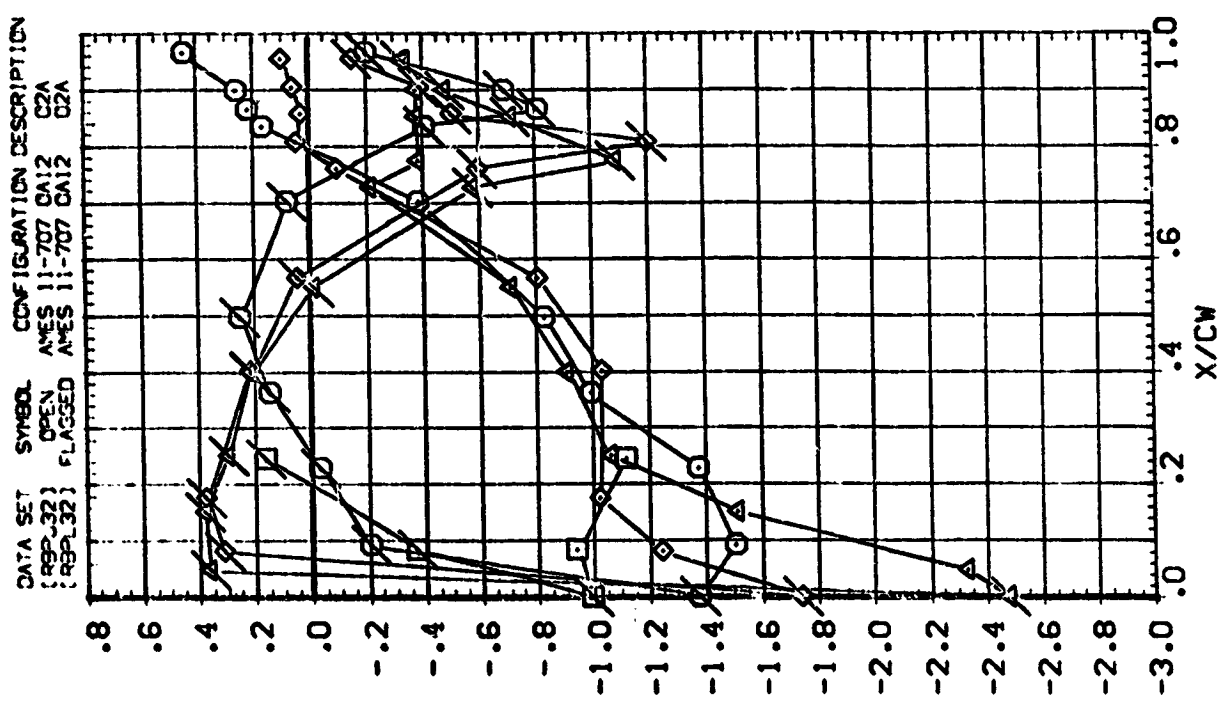
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES



SYMBOL Y/BA BETA MACH
◇ .299
□ .364
○ .427
△ .534

PARAMETRIC VALUES
ALPHA 20.000
ELEVON -20.000
RUDDER 0.000
RUDDER 0.000

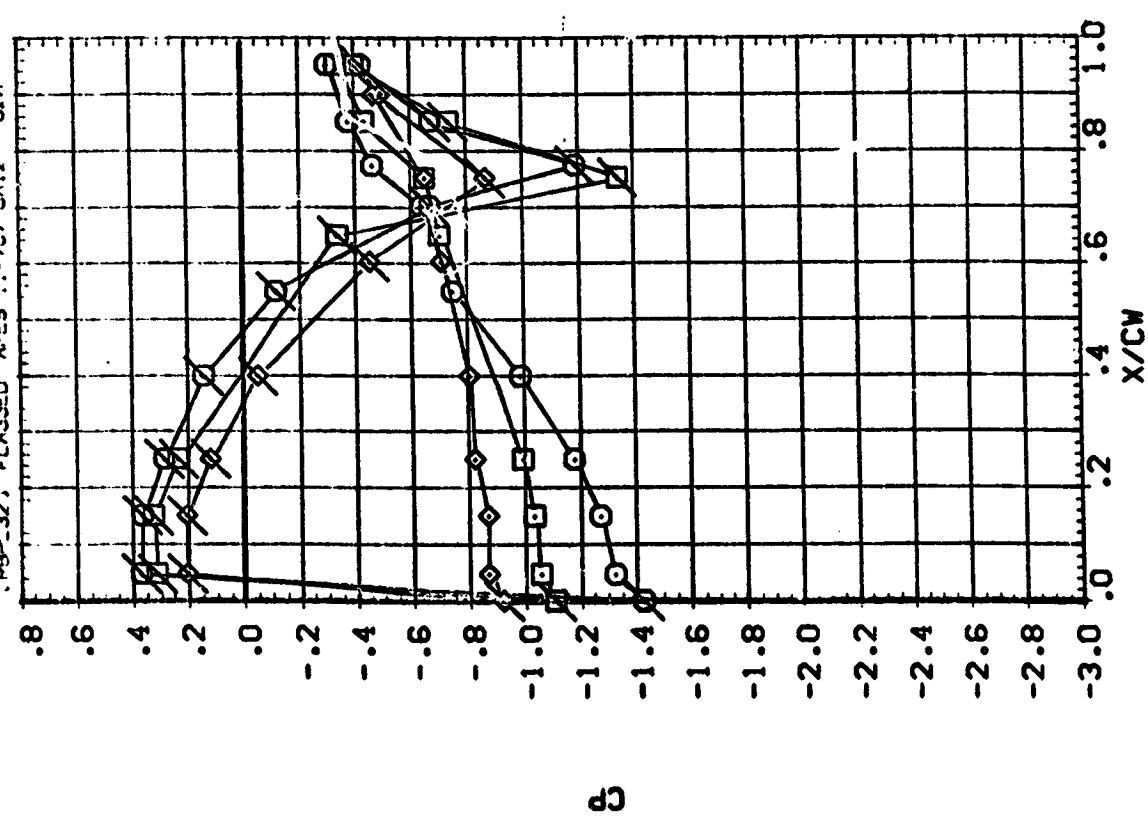
UPPER WING
LOWER WING



PARAMETRIC VALUES
 20.000 RUDER
 -20.000 RUDER
 ALPHA
 ELEVON

SYMBOL Y/BV BETA MACH
 .573 8.29% .600
 .780
 .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RBP_32) OPEN AMES 11-707 CA12 C2A
 (RBP_32) FLAGGED AMES 11-707 CA12 C2A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

SYMBOL

V/B₁

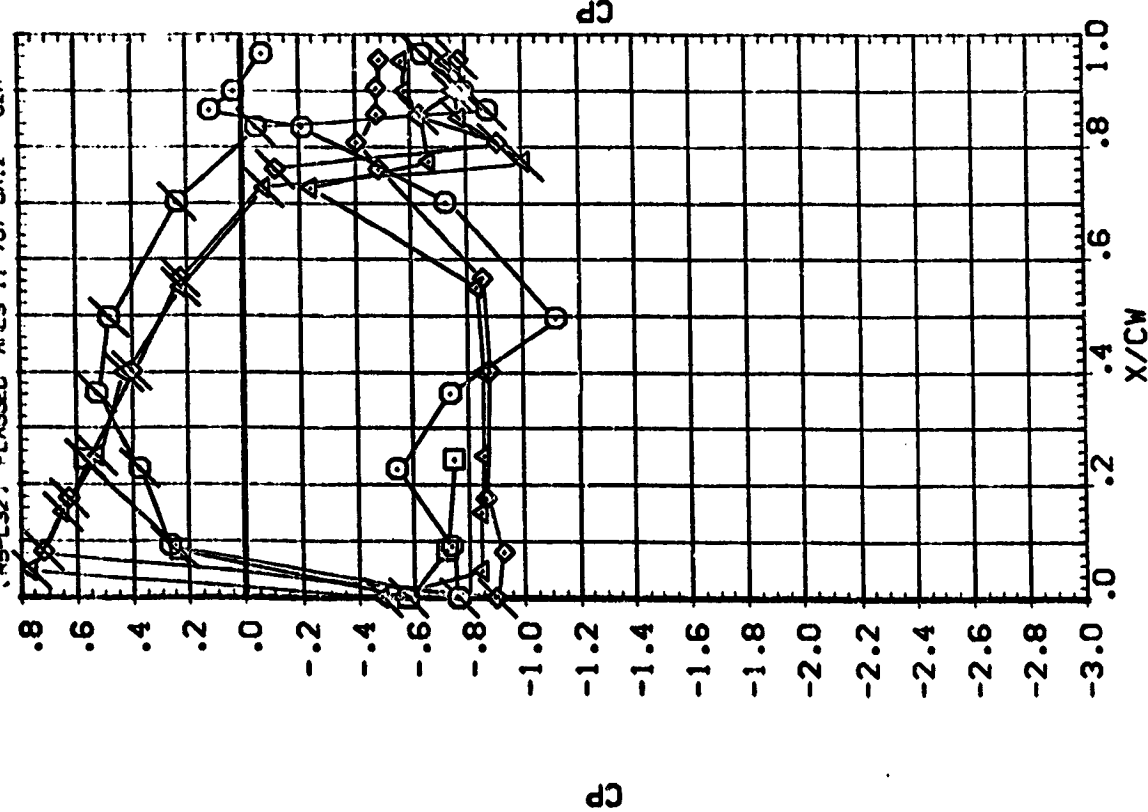
BETA

MACH

PARAMETER VALUES
ALPHA 20.000
ELEVON 20.000
RUBBER 20.000
RUBBER 20.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION

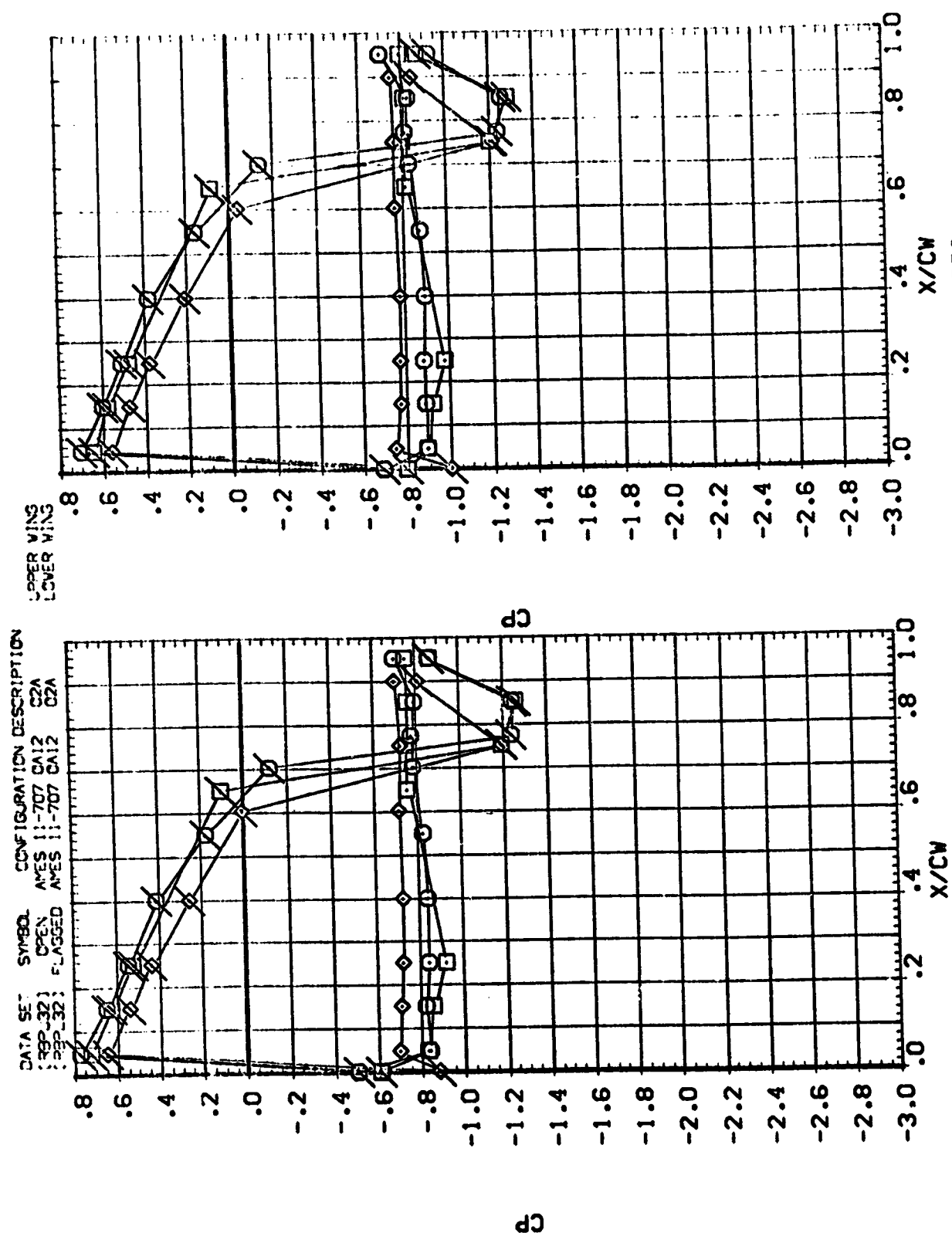
(RFL32) OPEN ANES 11-707 DA12 C2A
(RFL32) FLAGGED ANES 11-707 DA12 C2A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA 20.000 20.000 20.000
 ELEVON -20.000 20.000 20.000

SYMBOL Y/BV SE TA MACH
 .573 -8.070 .902
 .780 -4.000
 .887





SYMBOL Y/BV BETA MACH

○ .799 .070 .902

□ .364 4.220

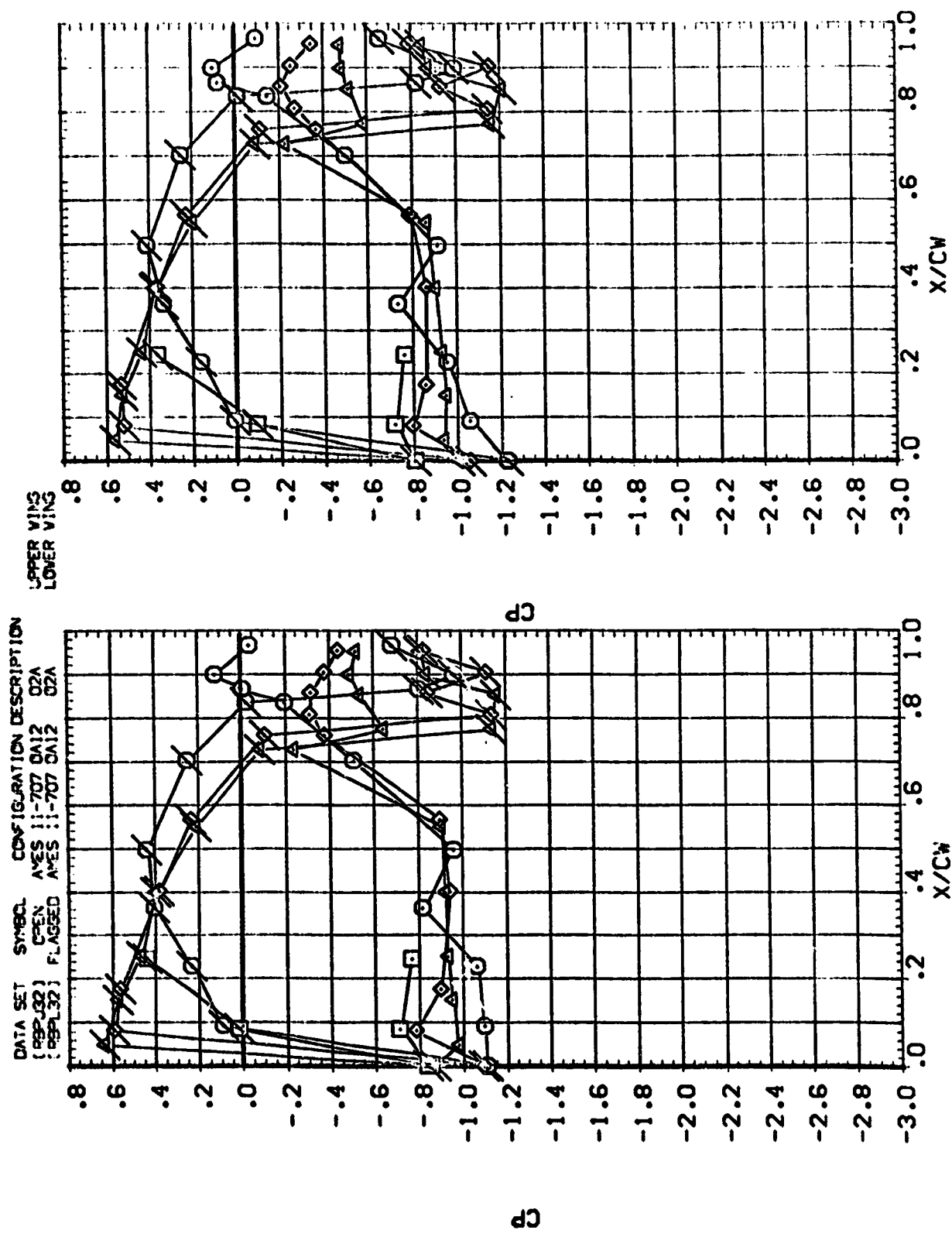
◇ .427

△ .534

PARAMETRIC VALUES

ALPHA 20.000 UPPER

ELEVON -20.000 R.5°LR



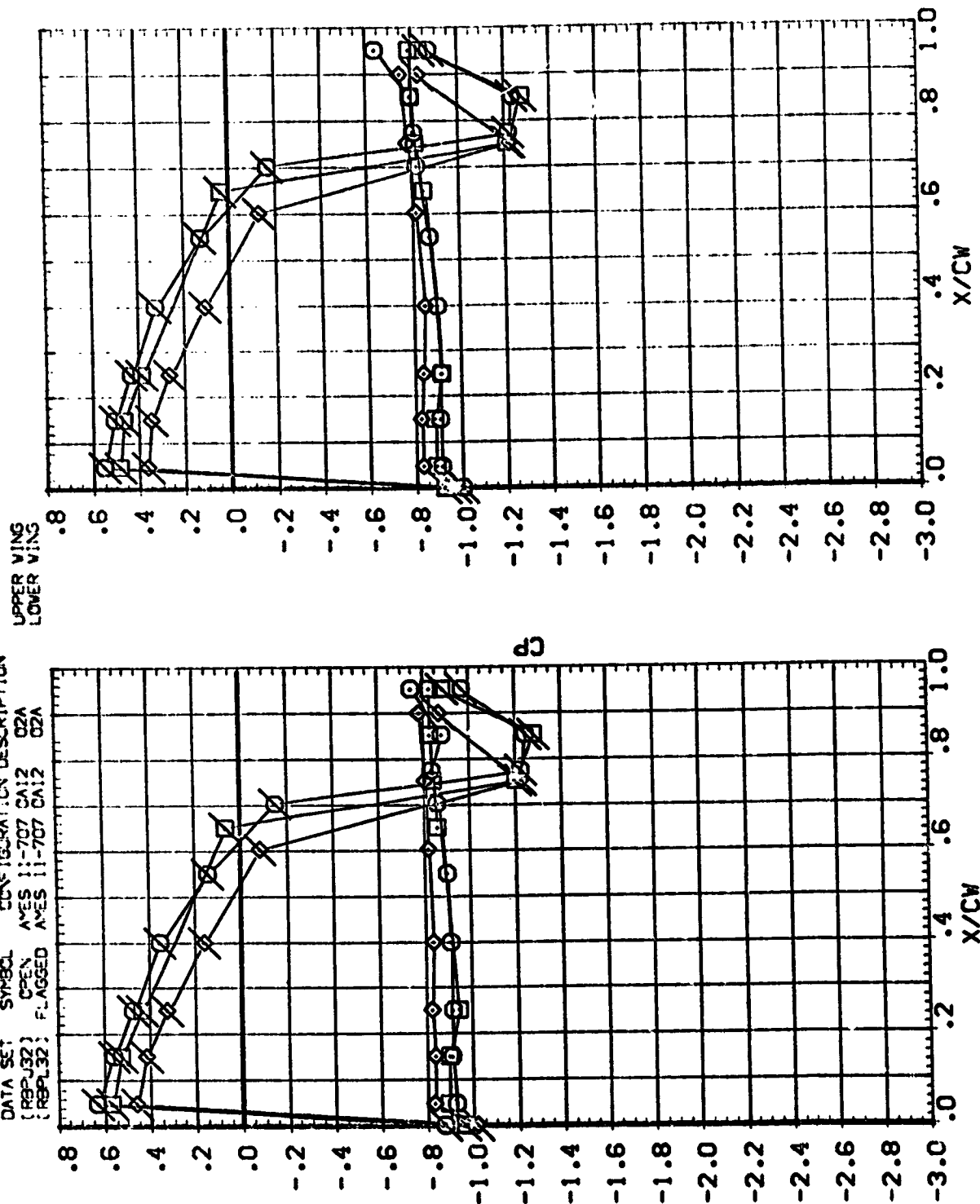
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 20.000 RUDDER
 -20.000 RUDDER

ALPHA
 ELEVEN

SYMBOL Y/BN BETA MACH
 .573 .070 .902
 .780 4.720
 .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RBPJ32) OPEN AXES 11-707 CA12 O2A
 (RBPJ32) FLAGGED AXES 11-707 CA12 O2A

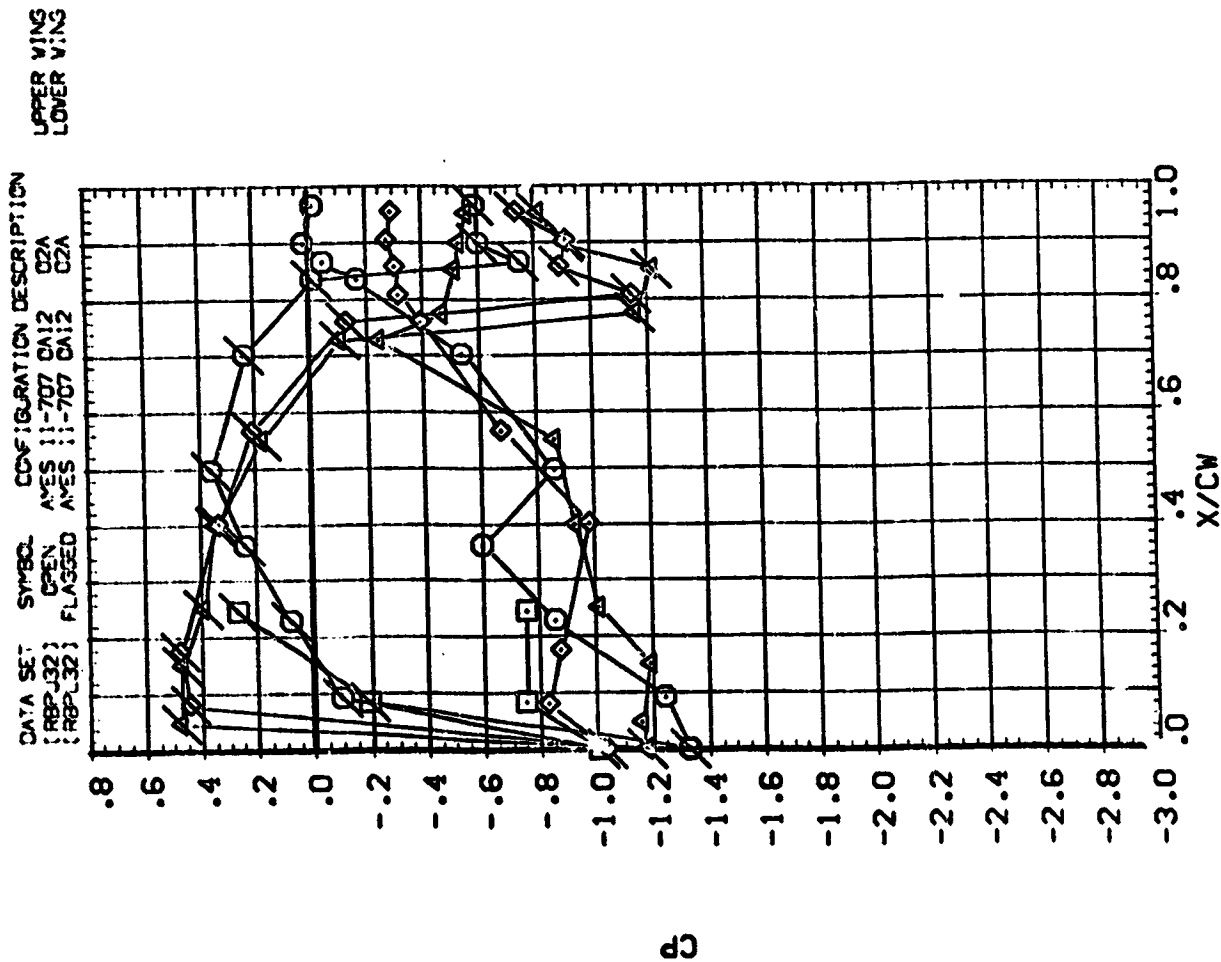


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES



SYMBOL Y/BV BETA MACH
□ .299 8.360 .902
○ .364
◇ .427
△ .534

PARAMETRIC VALUES
ALPHA 20.000 RUOGER
ELEVON -20.000 RUOFLR

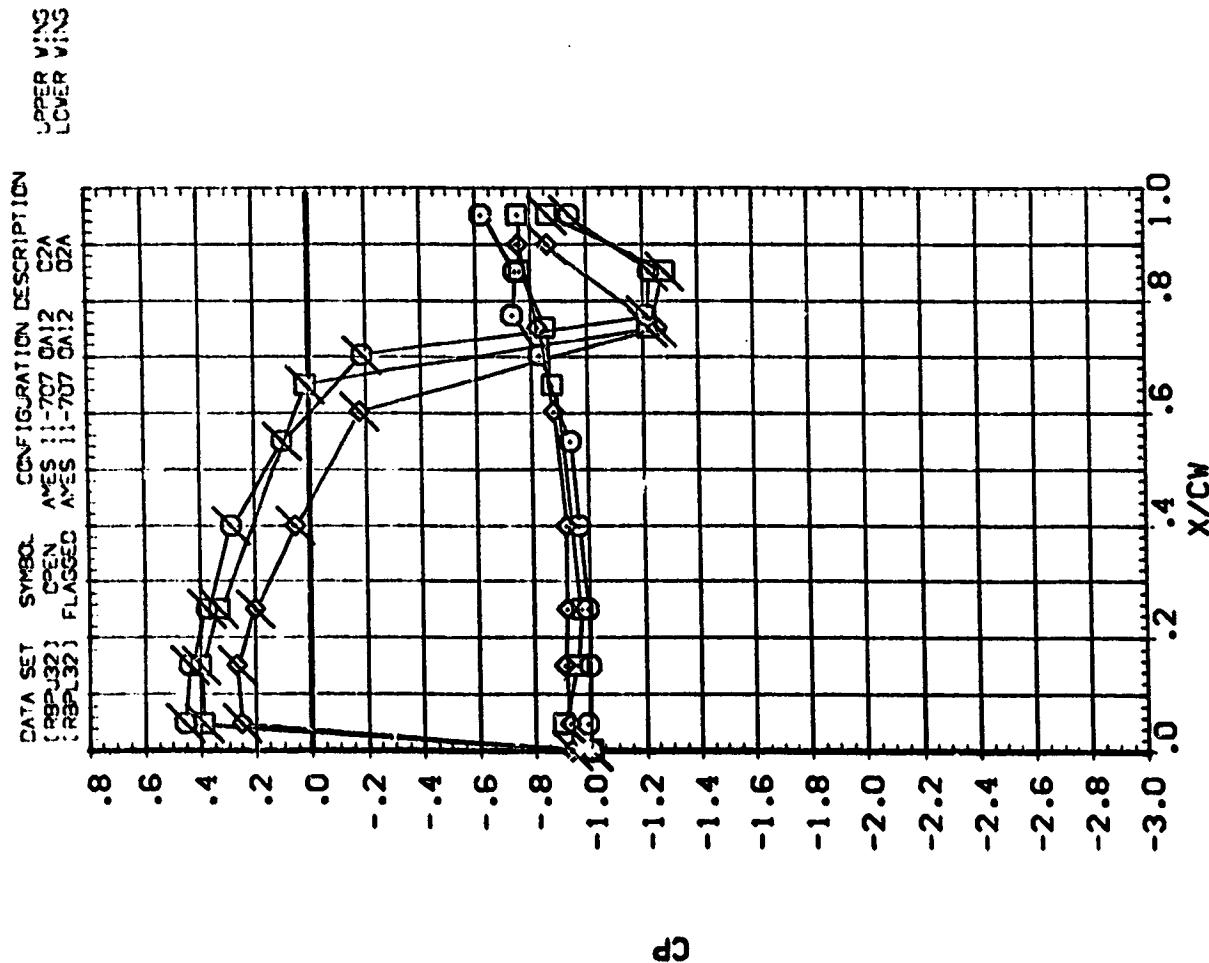


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 20.000 RUDDER
 -20.000 RUDDER

ALPHA
 ELEVEN

SYNOPSIS Y/BV BETA MACH
 .573 8.350 .902
 .78C
 .887

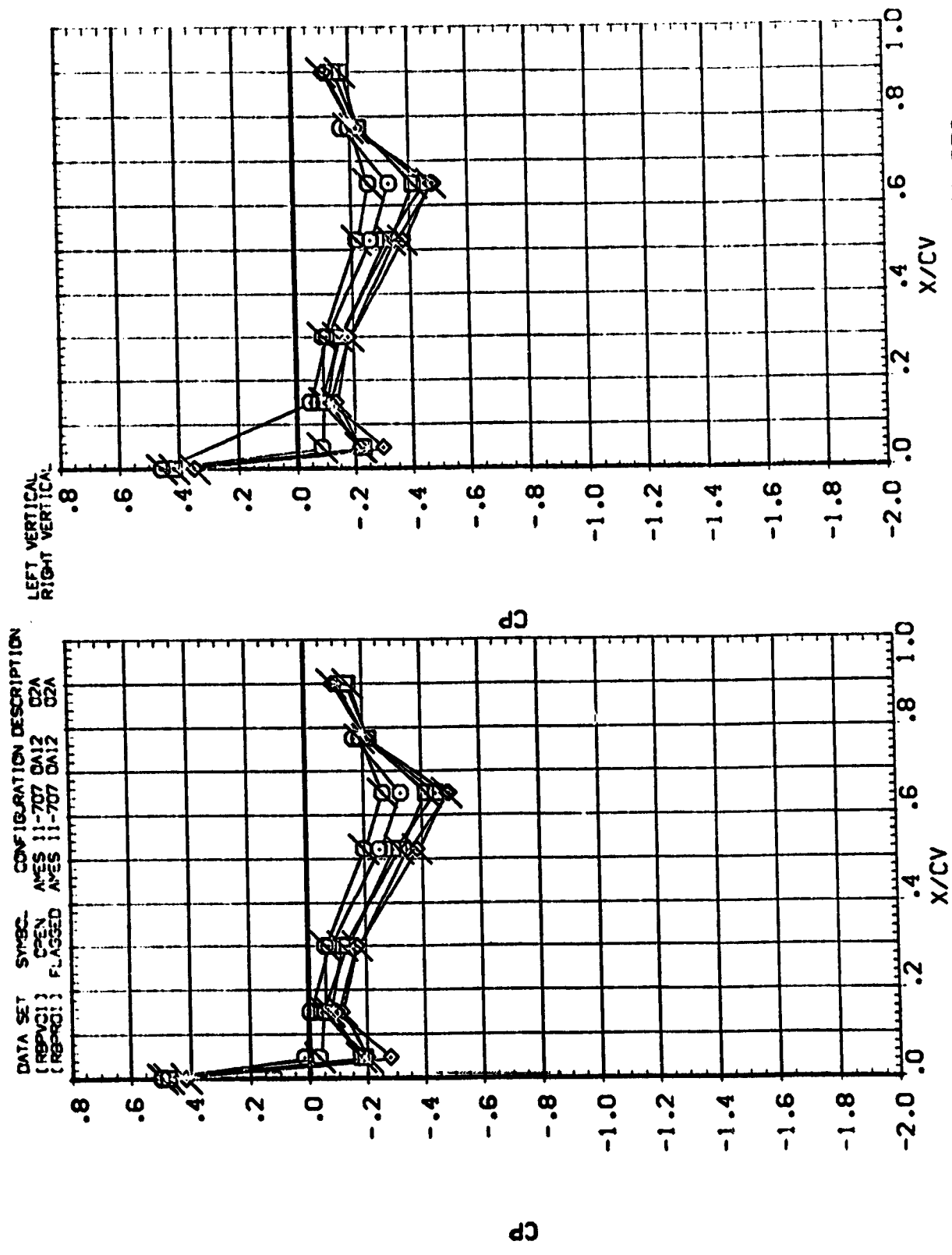


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 .000 RUDDER .000
 .000 RUDDER .000

BETA
 ELEVON

SYSEC Z/BV ALPHA MACH
 .158 -4.410 .600
 .316 .000
 .600



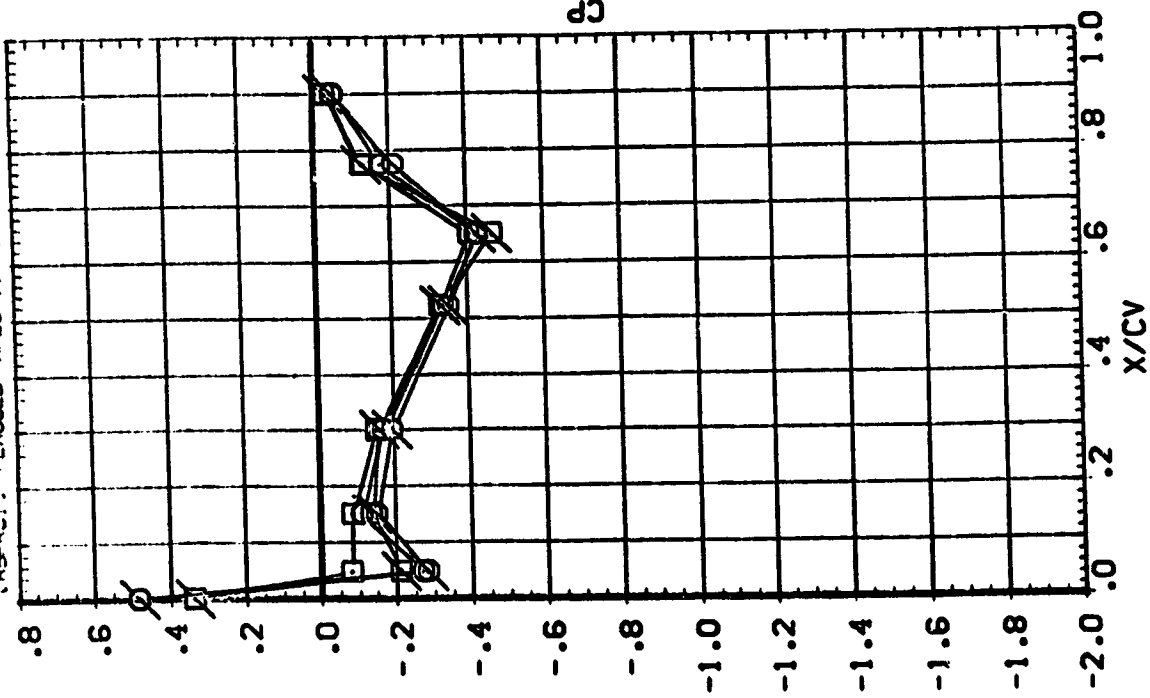
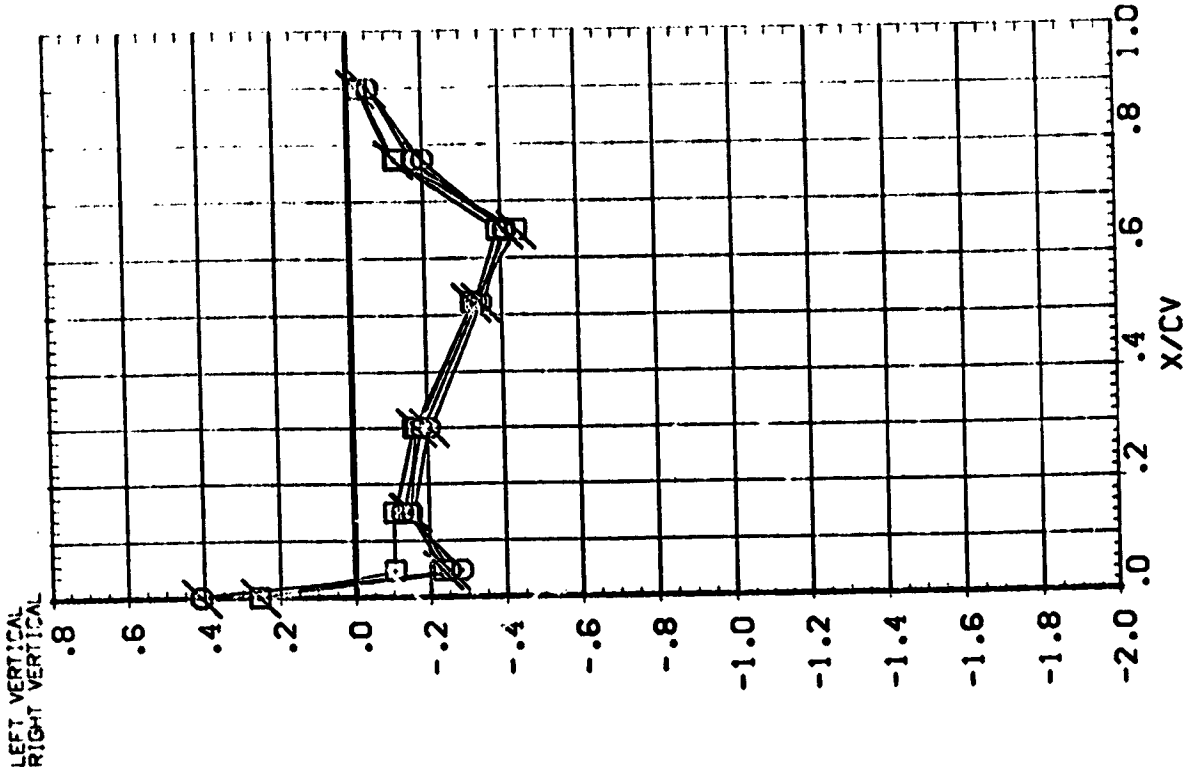
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 .000 R0000
 .000 R0000
 .000 R0000

BETA
 ELEVON

SYMBOL Z/BV ALPHA MACH
 .840 -4.410 .600
 .975 .030

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RBPVC) CEN AMES 11-707 OA12 C2A
 (RBPVC) FLAGGED AMES 11-707 OA12 C2A



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

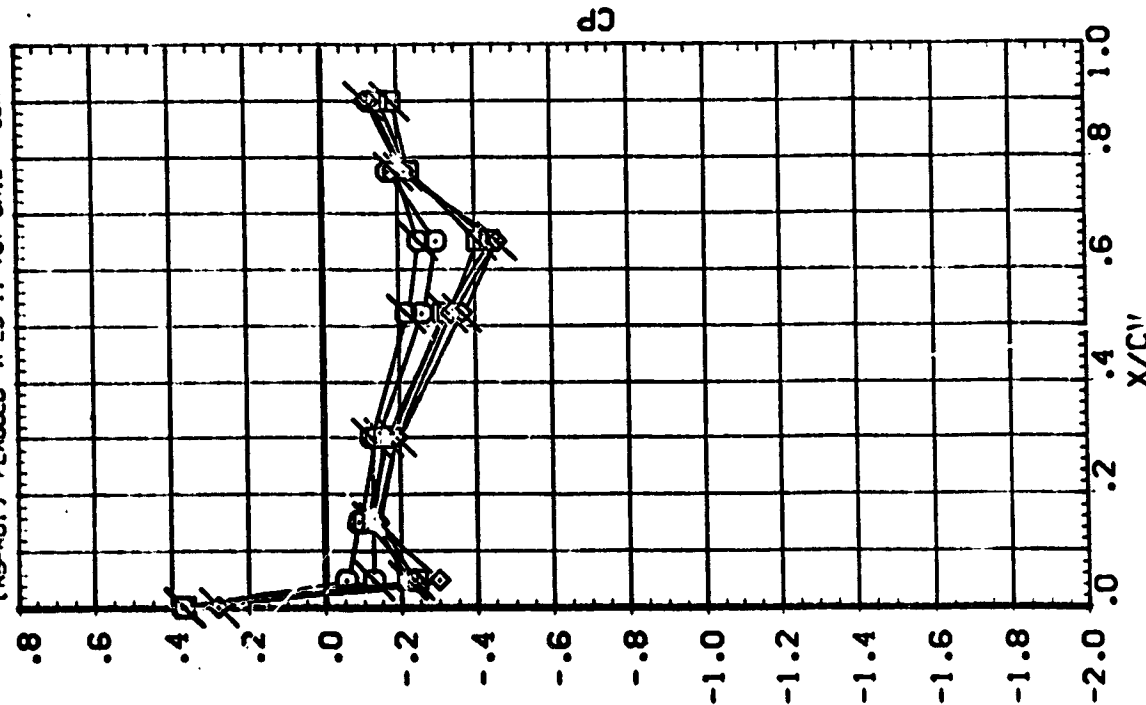


SYMBOL Z/BV .158 .316 .600
□ ◇

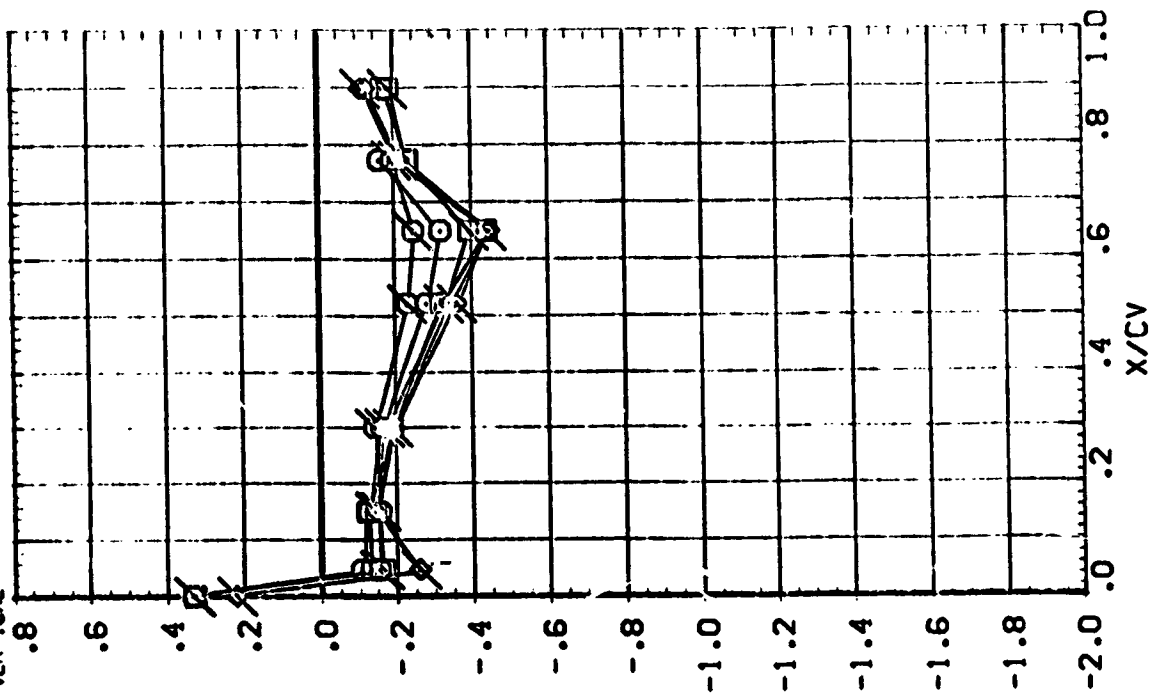
ALPHA 5.030 .600
:0.64C

PARAMETRIC VALUES
BETA .000 RUDDER .000
ELEVON .000 RUDLER .000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
(REPVAL) OPEN AYES 1:-707 OA12 OA2
(REPVAL) FLAGGED AYES 1:-707 OA12 OA2



LEFT VERTICAL
RIGHT VERTICAL



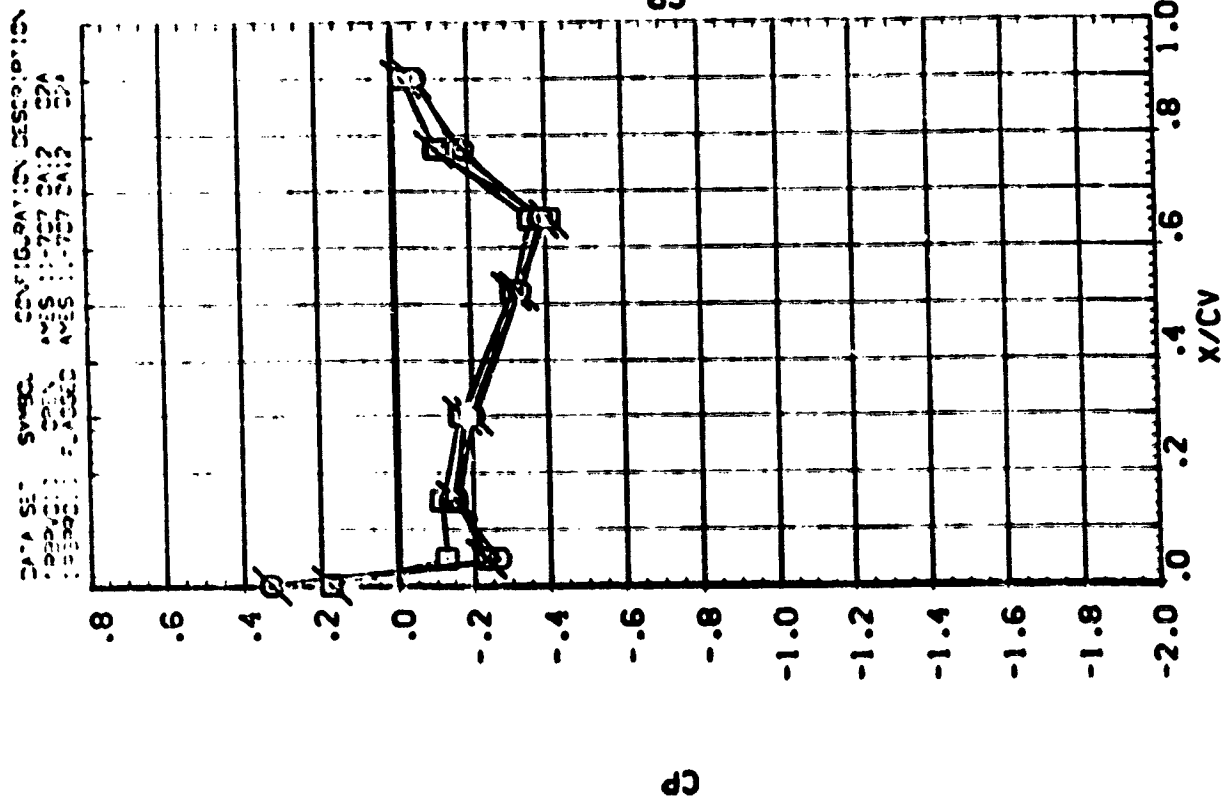
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETER VALUES

BETA	1.000	1.000	1.000
ELEV	1.000	1.000	1.000

BETA
ELEV

SWRGC 7/3 .840 .923
 1.000 1.000
 SWRGC 7/3 .840 .923
 1.000 1.000



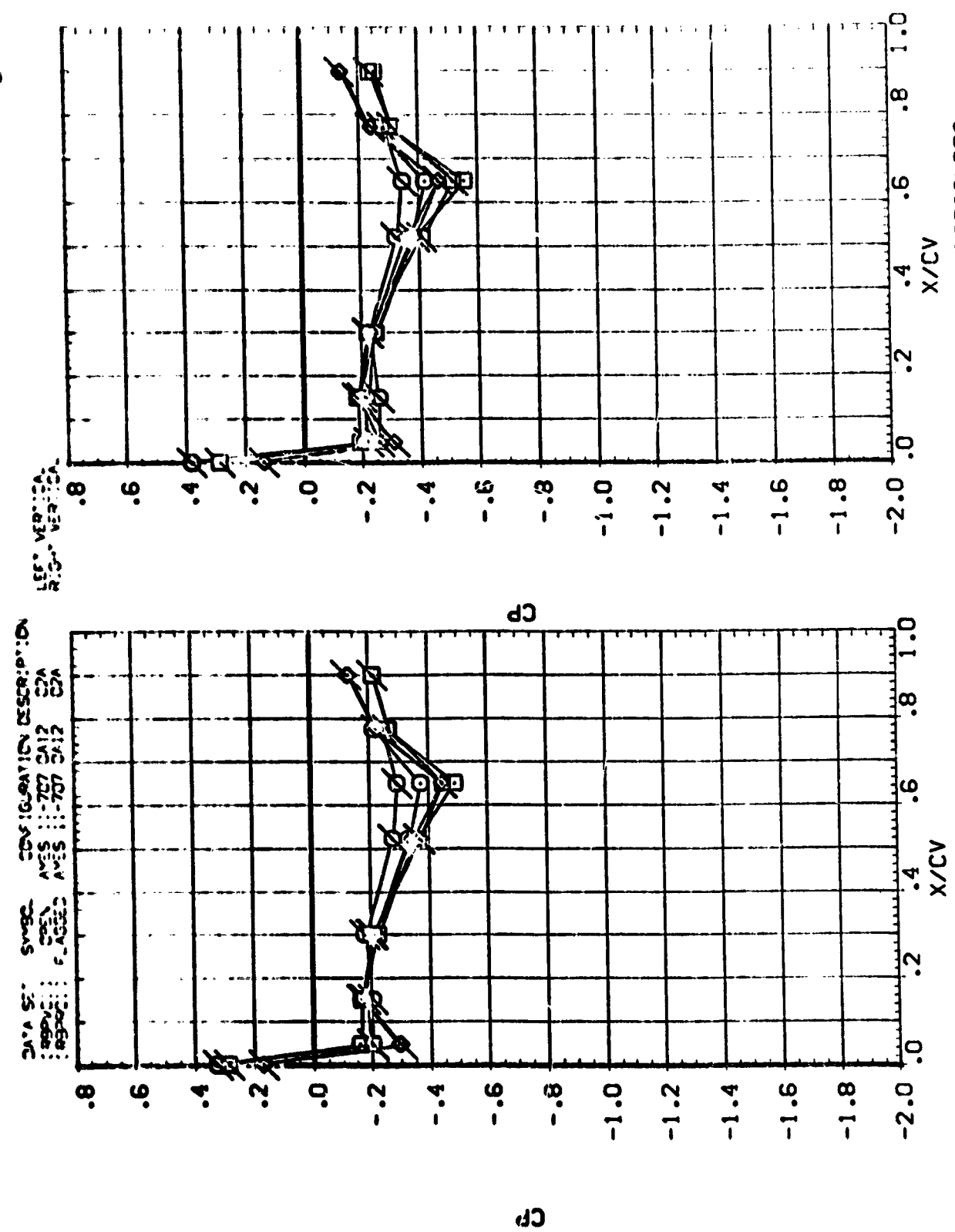
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

5-11

0-724
5-26

0-724
5-26

100-443887-100

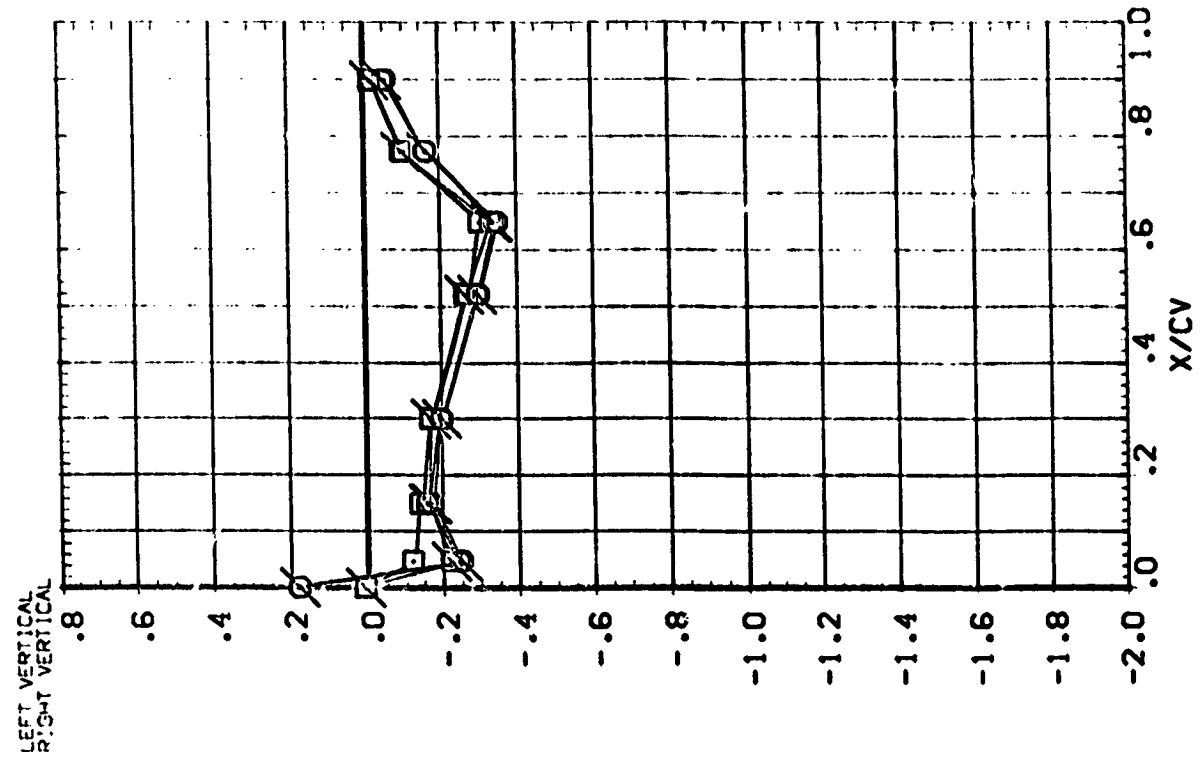
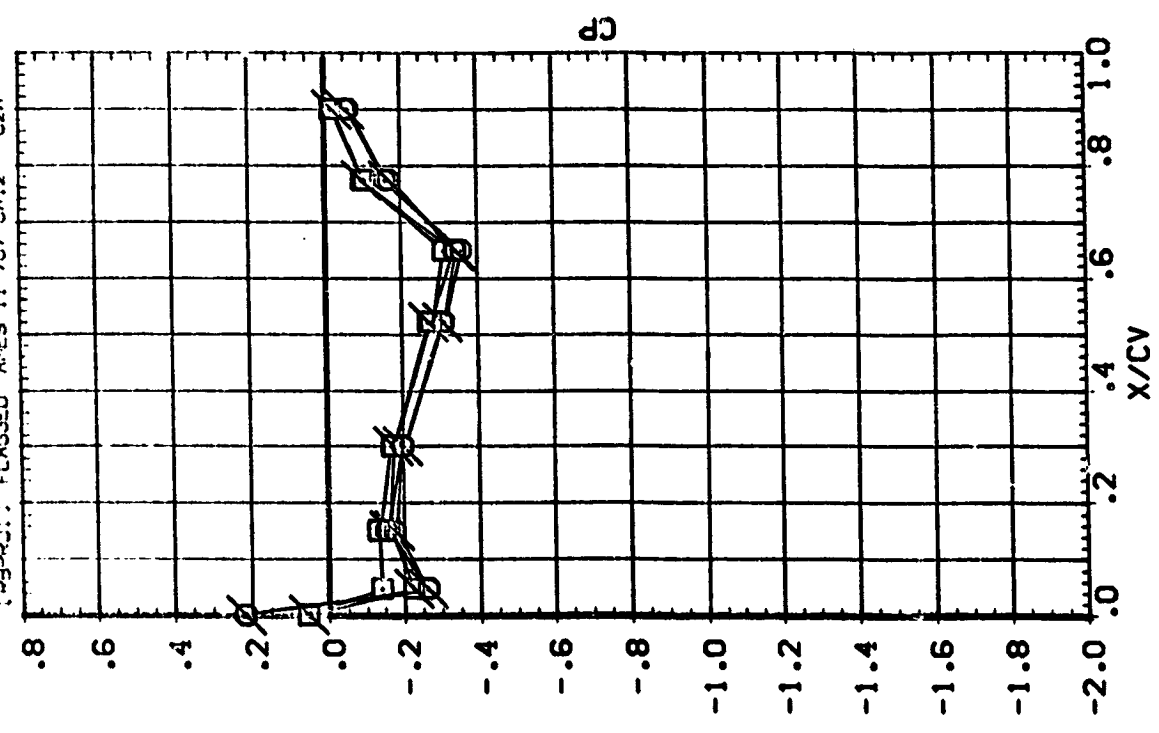


CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

ELEVATION

9.75 22.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
:BPV01: OPEN AVES 11-707 CA12 C2A
:BPV02: FLAGGED AVES 11-707 CA12 C2A

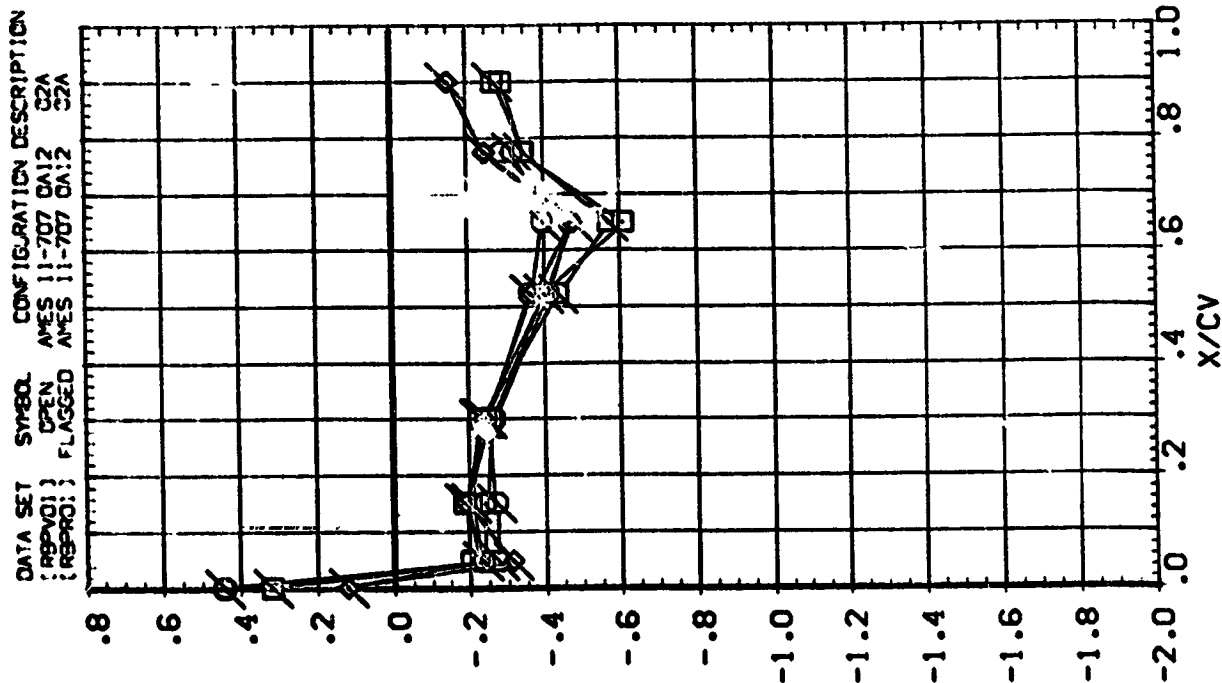


CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

SYMBOL Z/BV ALPHA MACH
 .158 22.580 .600
 .316
 .600

BETA ELEVON
 .000 .000
 .000 .000
 .000 .000

LEFT VERTICAL
 RIGHT VERTICAL



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES

BETA
ELEVON

ALPHA
MACH

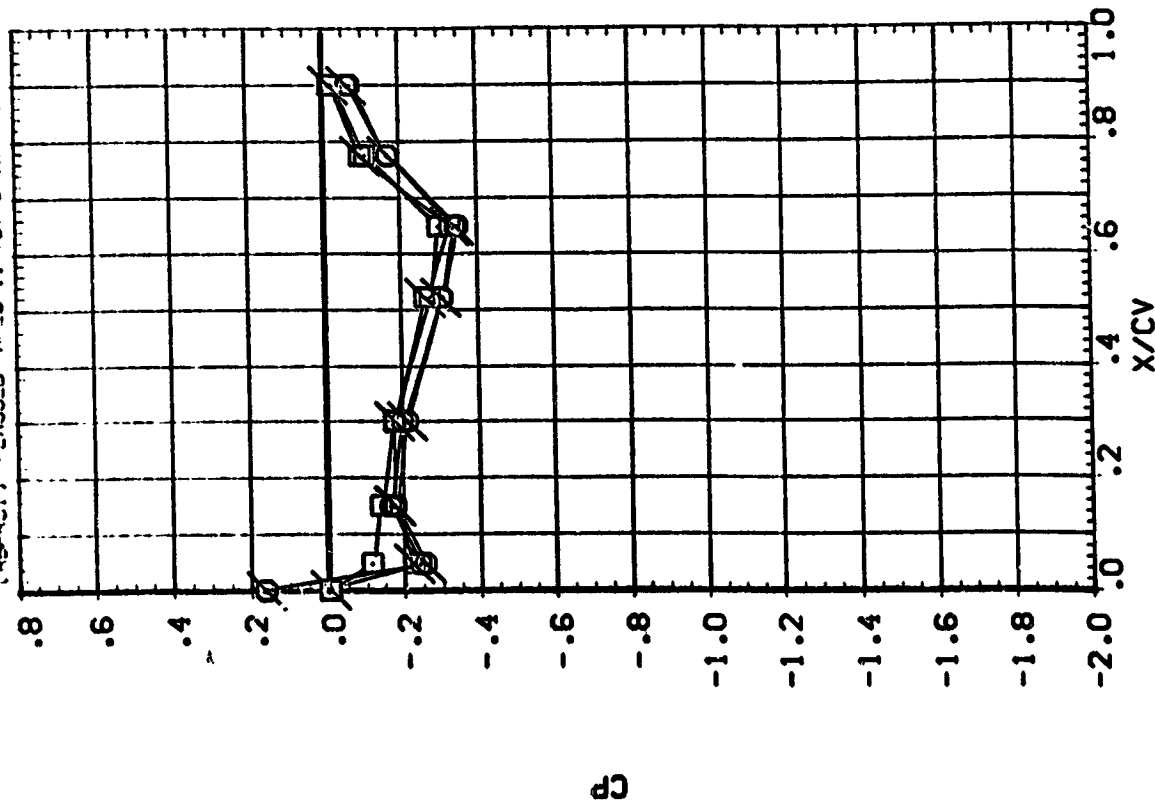
22.58C
.60C

Z/BV
.84C
.925

SYMBOL

DATA SET SYMBOL CONFIGURATION DESCRIPTION
[REPRC1] OPEN AMES 11-707 OA12 C2A
[REPRC2] FLAGGED AMES 11-707 OA12 C2A

LEFT VERTICAL
RIGHT VERTICAL



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES



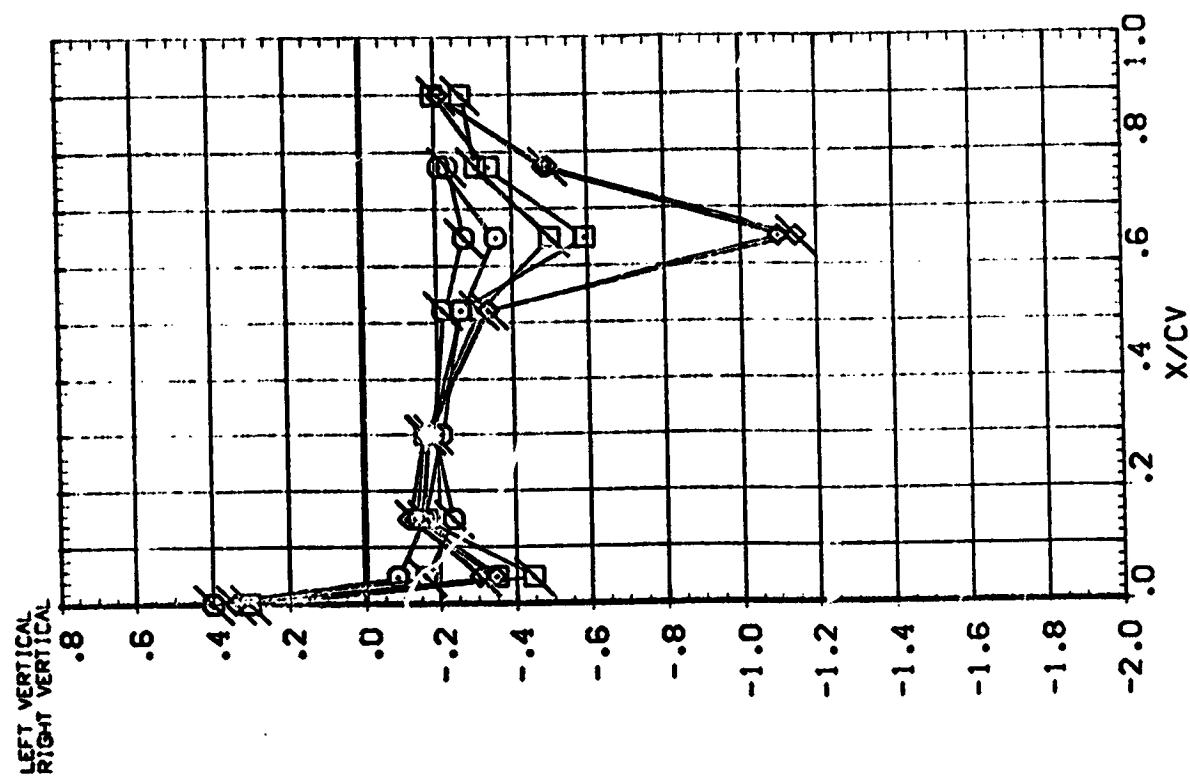
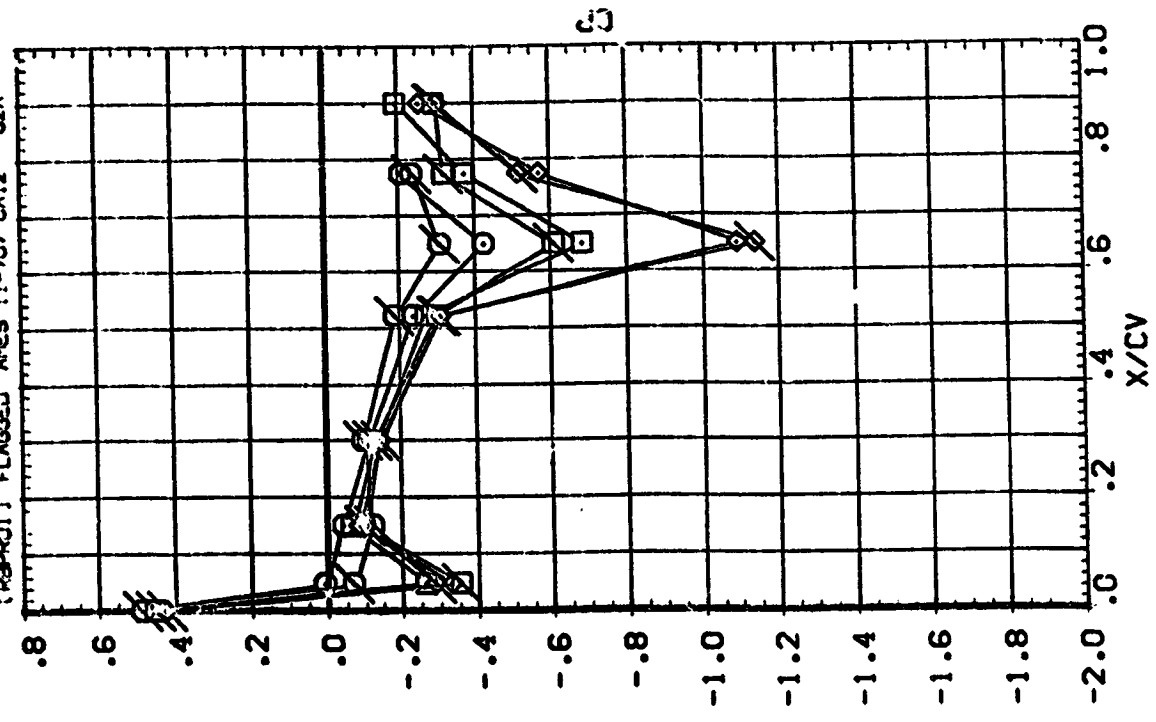
SYMBOL Z/BV ALPHA MACH
 .158
 .316
 .600

ALPHA MACH
 -4.560
 -.010

BETA ELEVON
 .000
 .000
 .000

PARAMETRIC VALUES
 .000
 .000
 .000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REP-01) OPEN ANES 11-707 CA12 C2A
 (REP-01) FLAGGED ANES 11-707 CA12 C2A



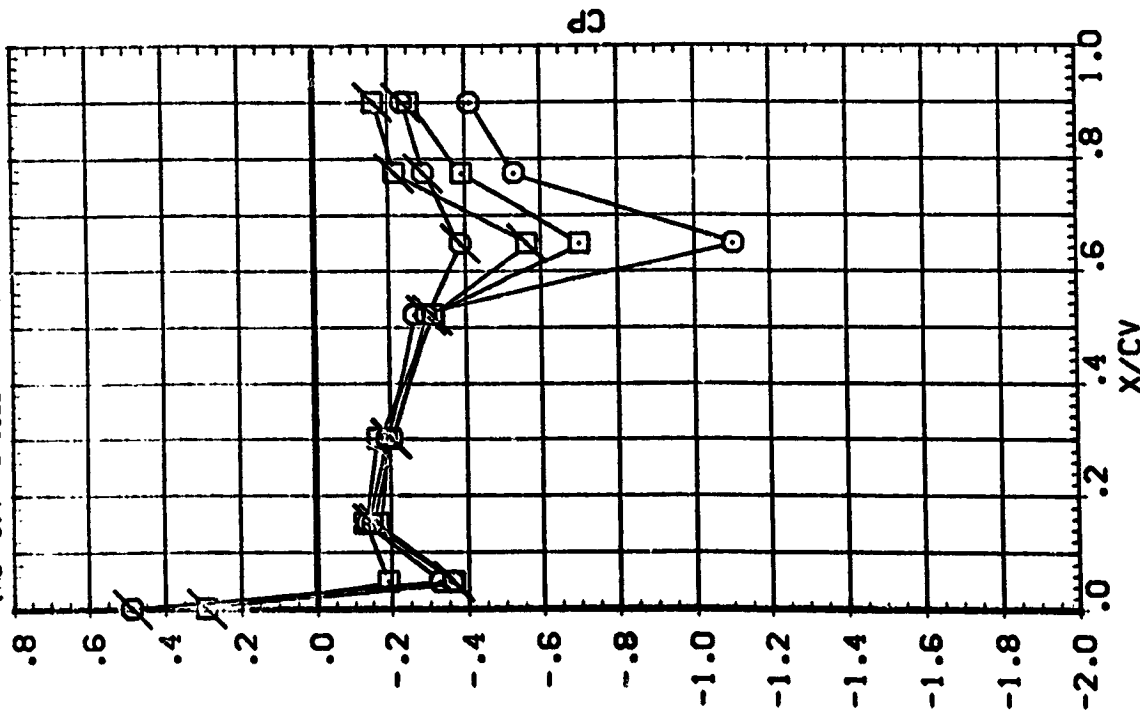
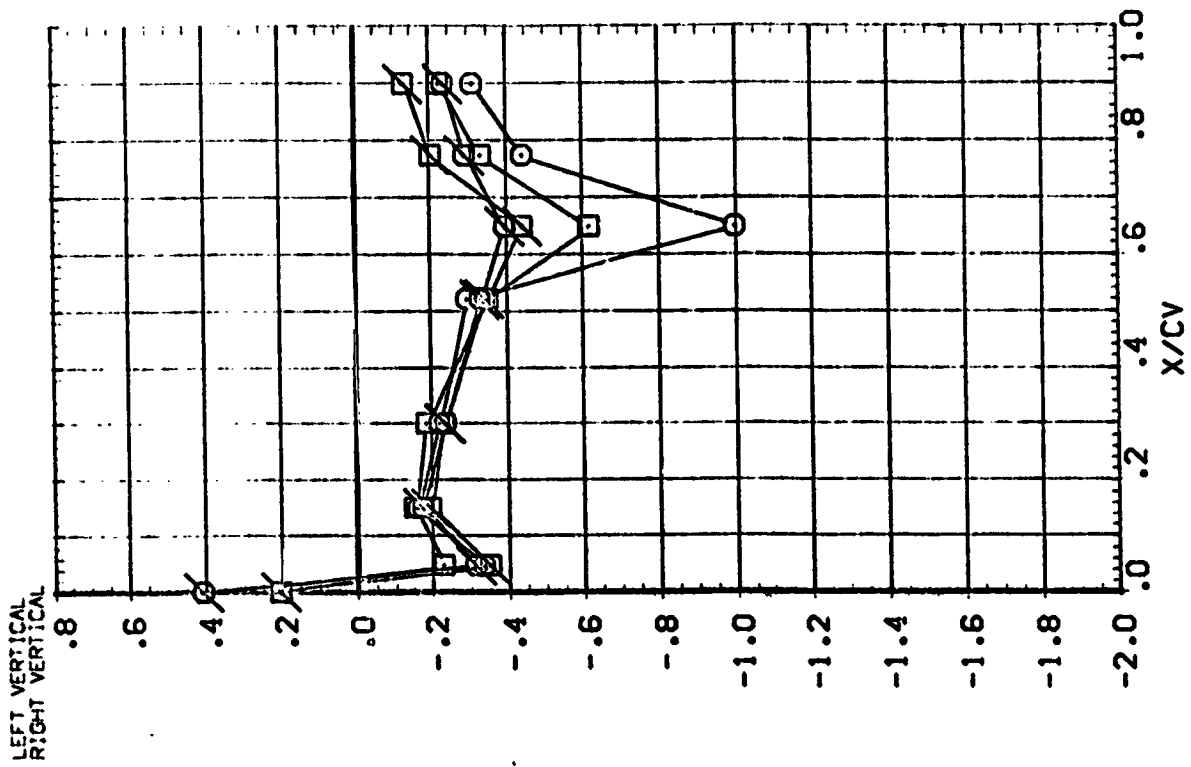
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES

BETA .000
ELEVON .000
RUDDER .000
RUDDER .000

DATA SET: SYMBO. CONFIGURATION DESCRIPTION
[RB300] OPEN ASES 11-707 OA12 O2A
[RB300] FLAGGED ASES 11-707 OA12 O2A

SYMBO. Z/BV ALPHA VACH .905
OL1 .84C
.925

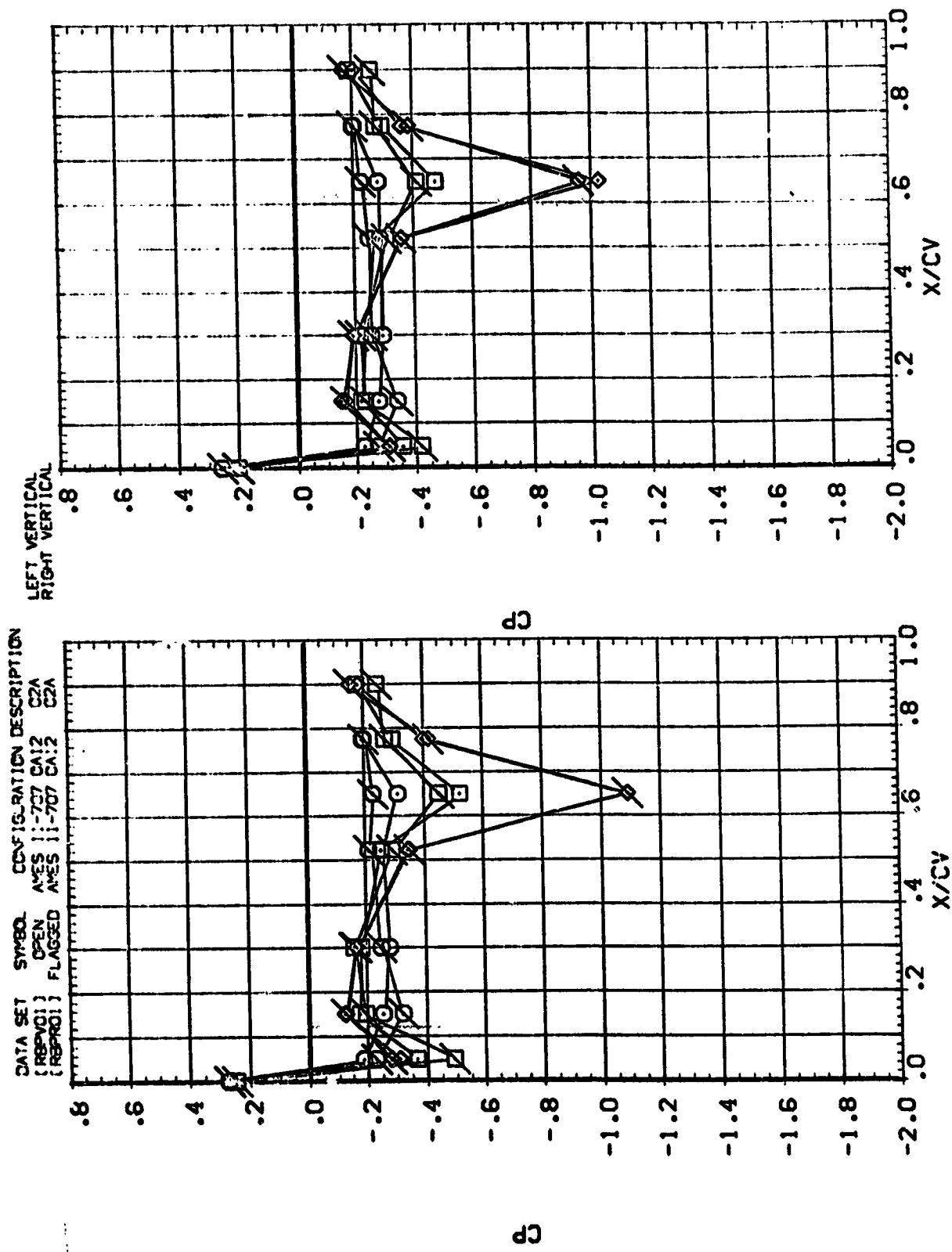


CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES



SYMBOL Z/BV ALPHA MACH
.158 4.980 .905
.316 9.990
□ ◇

PARAMETRIC VALUES
BETA .000
ELEVON .000
RUDDER .000
RUJFLR .000

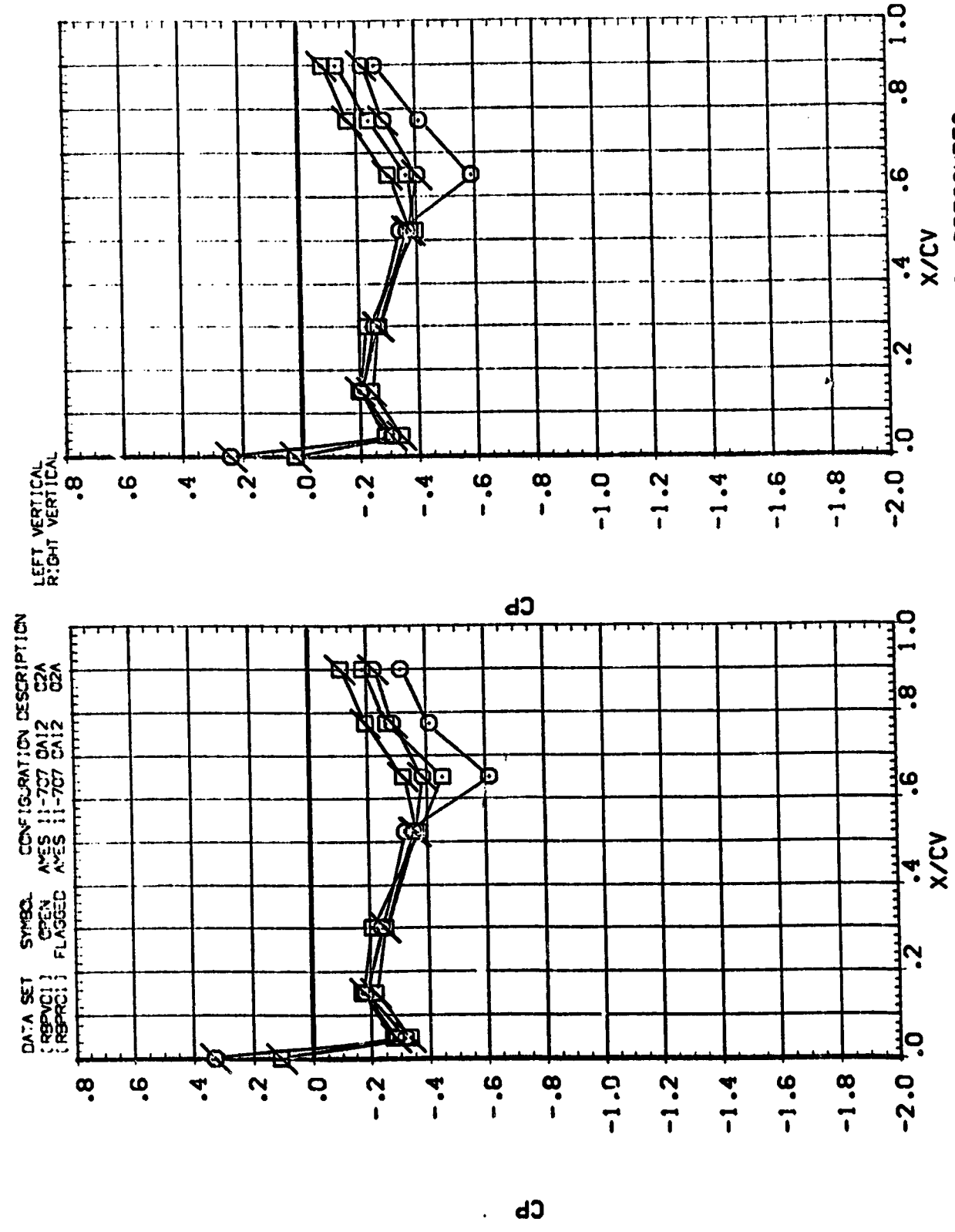


PARAMETRIC VALUES

BETA	.000	RODGER	.000
ELEVON	.000	RODGER	.000

SYMBOL

Z/BV	ALPHA	MACH
.84C	4.980	.905
.925	9.990	

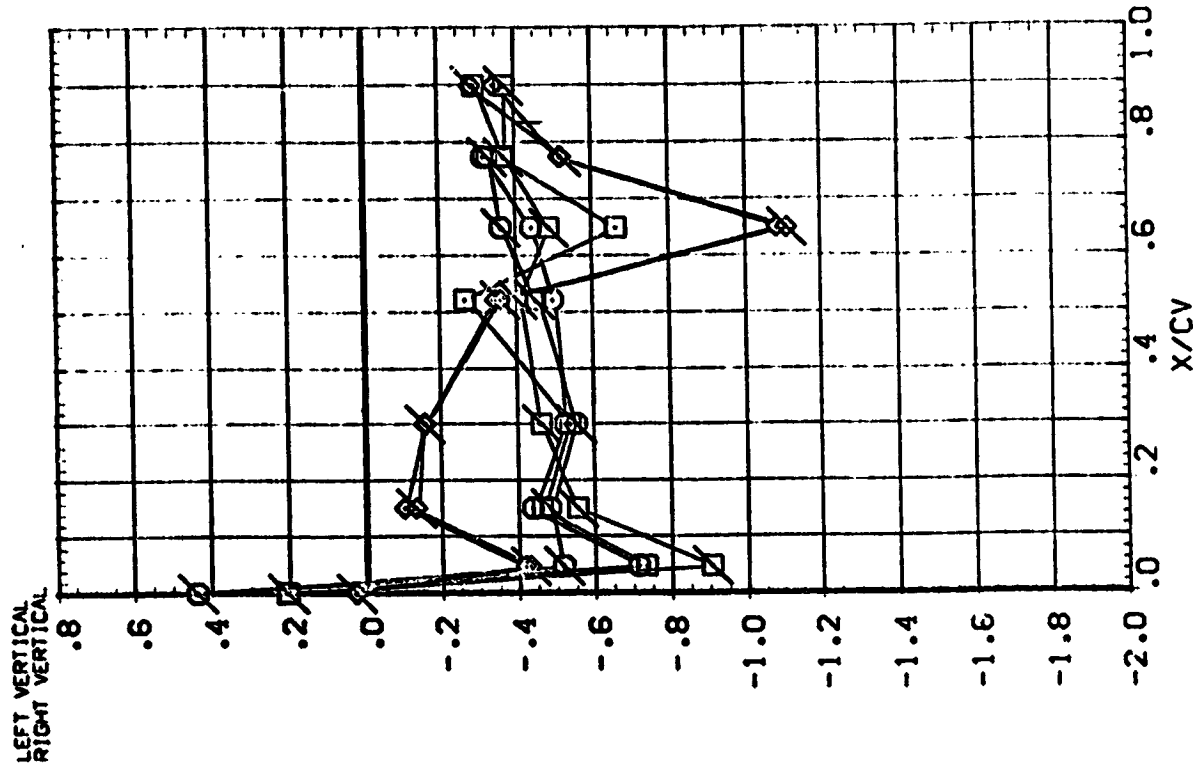
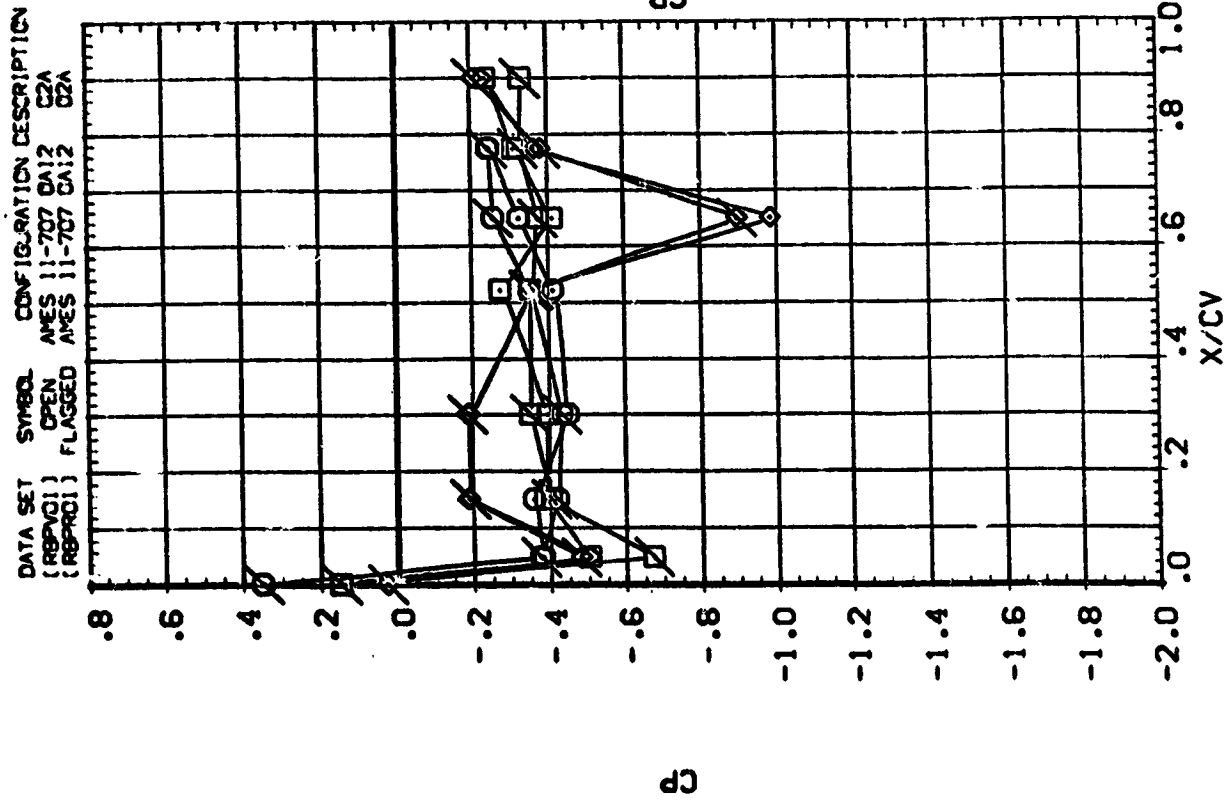


CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES



SYMBOL Z/BV ALPHA MACH
 ○ .158 14.990 .905
 □ .316 20.020
 ◇ .600

BETA ELEVON
 .000 RUDDER
 .000 RUSSLR
 .000



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

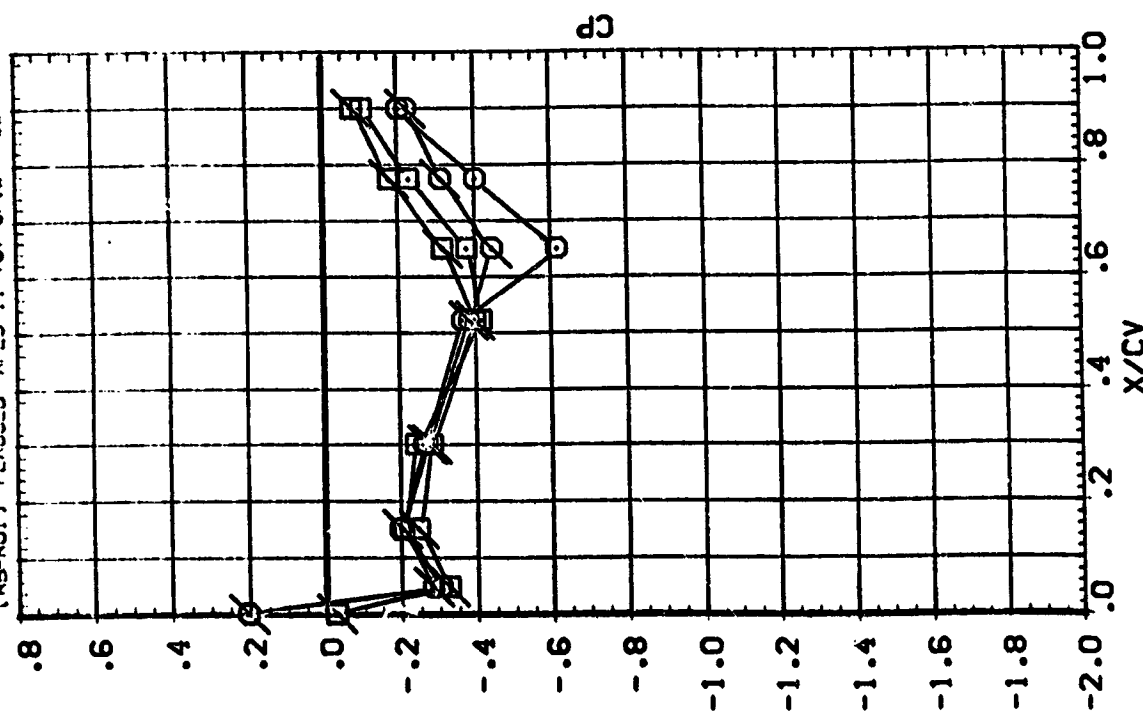
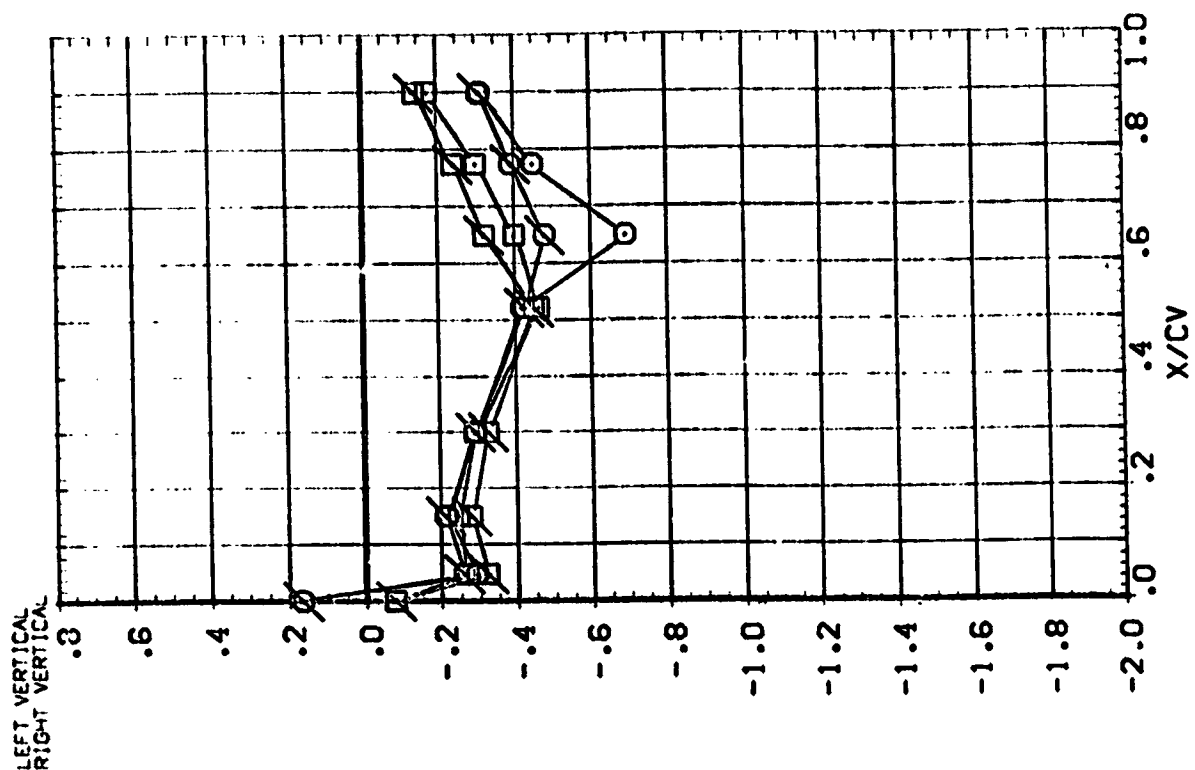
PARAMETRIC VALUES
 .000 RUDGER .000
 .000 RUDFLR .000

BETA
 ELEVON

ALPHA MACH
 14.990 .905
 20.020

Z/BV
 .840
 .925

DATA SET SYMBO. CONFIGURATION DESCRIPTION
 (RBPVCI) OPEN AVES 11-707 CA12 C2A
 (RBPVCI) FLAGGED AVES 11-707 CA12 C2A



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES



SYMBOL
Z/B
.158
.316
.632

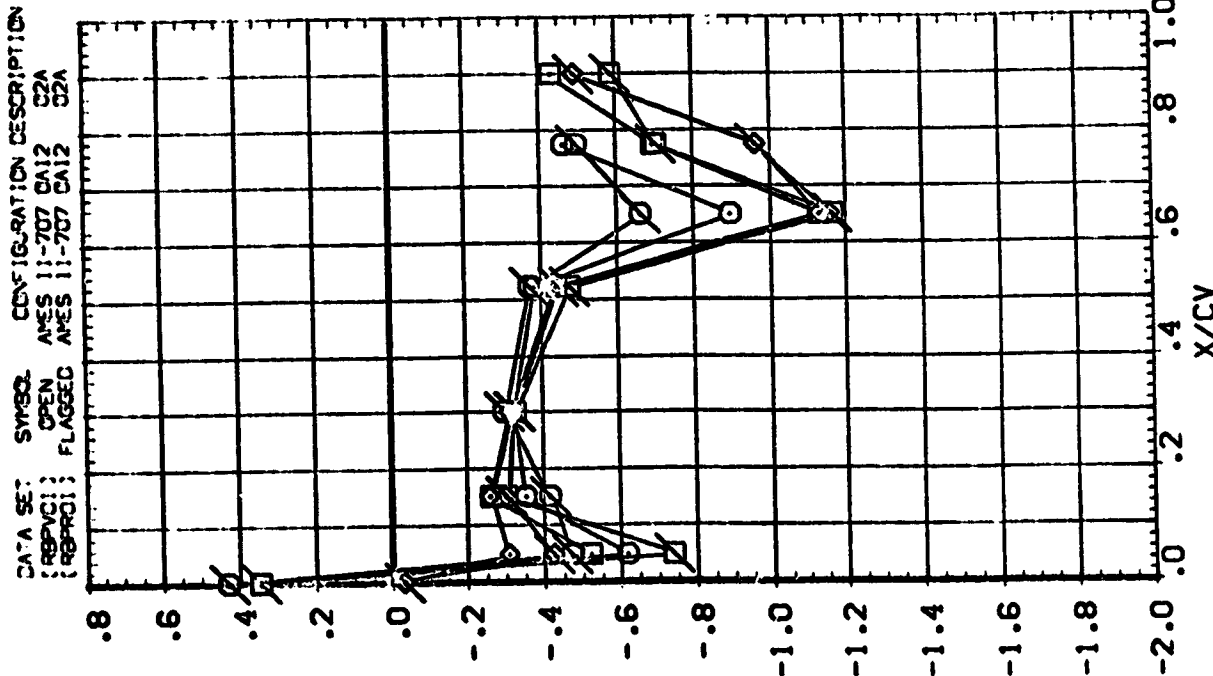
ALPHA
25.04C

MACH
.905

BETA
ELEVON

PARAMETRIC VALUES
RUBBER
RUBBER
RUBBER

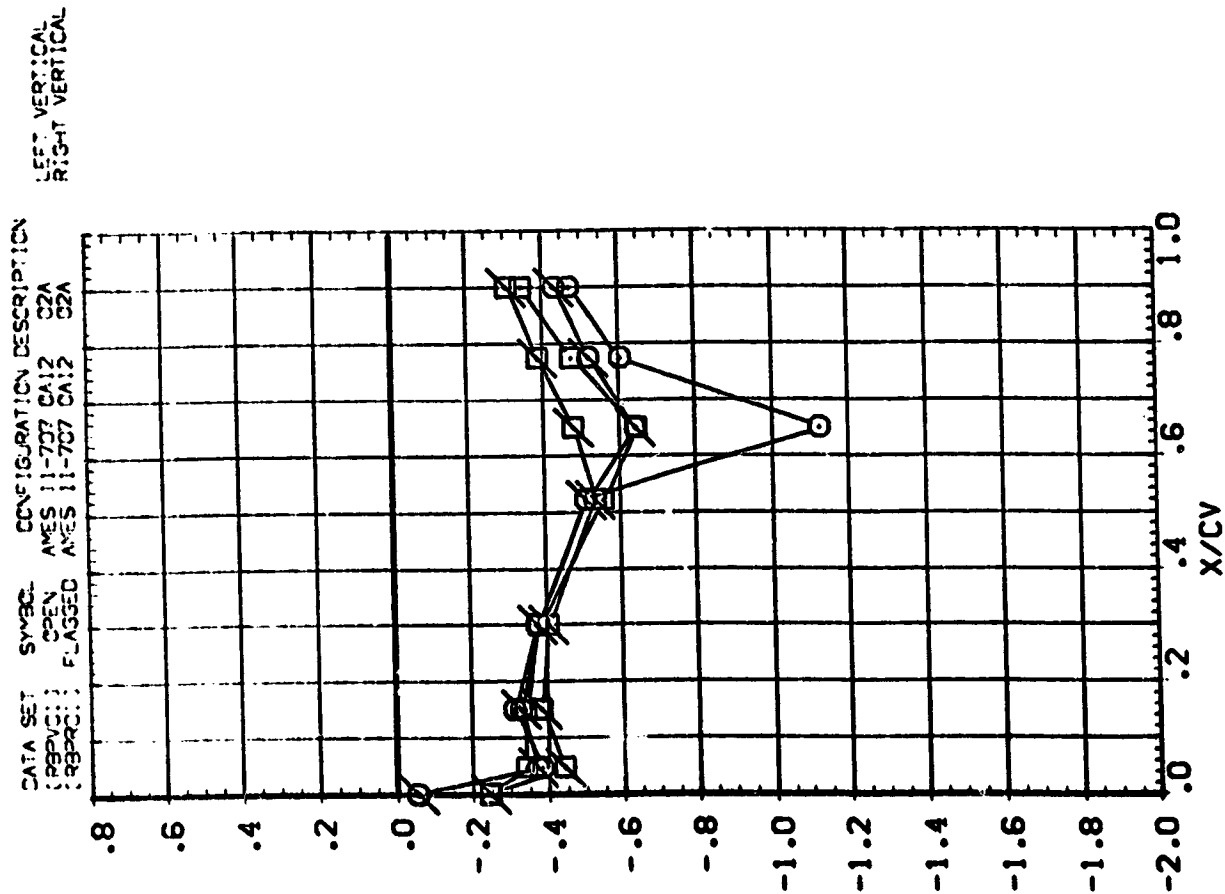
LEFT VERTICAL
RIGHT VERTICAL



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

BETA
 ELEVON
 .000
 .000
 .000
 .000
 .000
 .000

SYMBO
 Z/B/
 .840
 .975
 ALPHA
 25.24C
 MACH
 .905



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

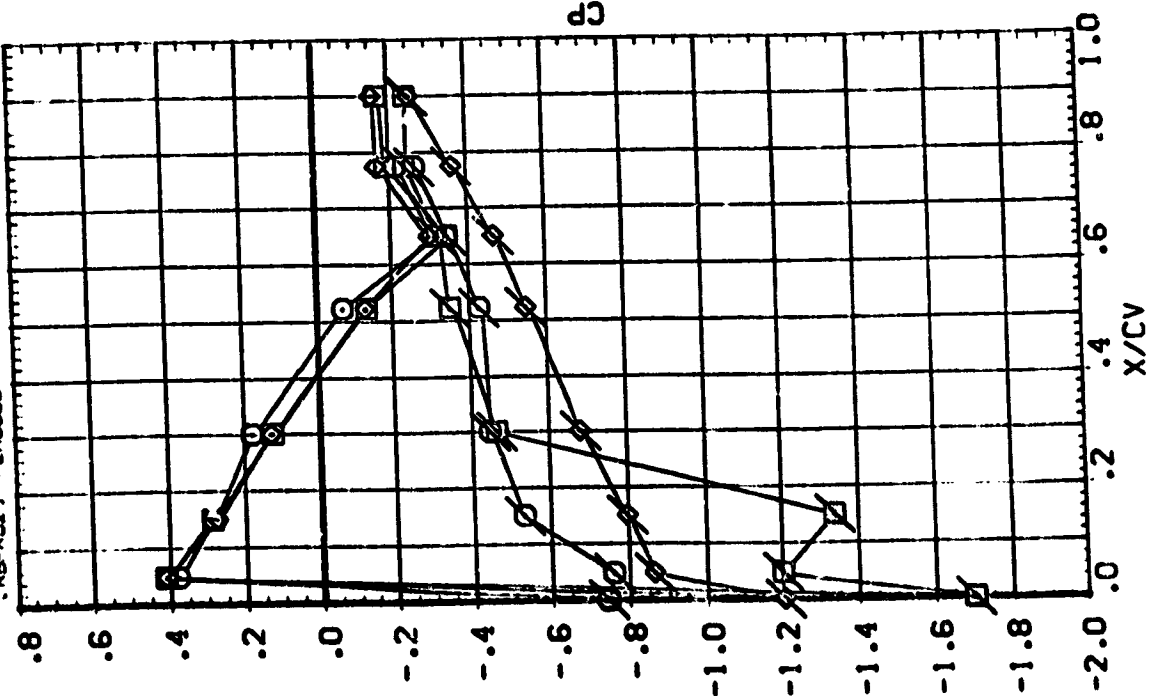


SYNCH 2/3V
1.58
3.16
6.00

BETA
-10.010
-4.960

MACH
.598

DATA SET SYMBOL CONFIGURATION DESCRIPTION
(REPVC2) OPEN APES 11-707 OA12 C2A
(REPVC2) FLANGED APES 11-707 OA12 C2A

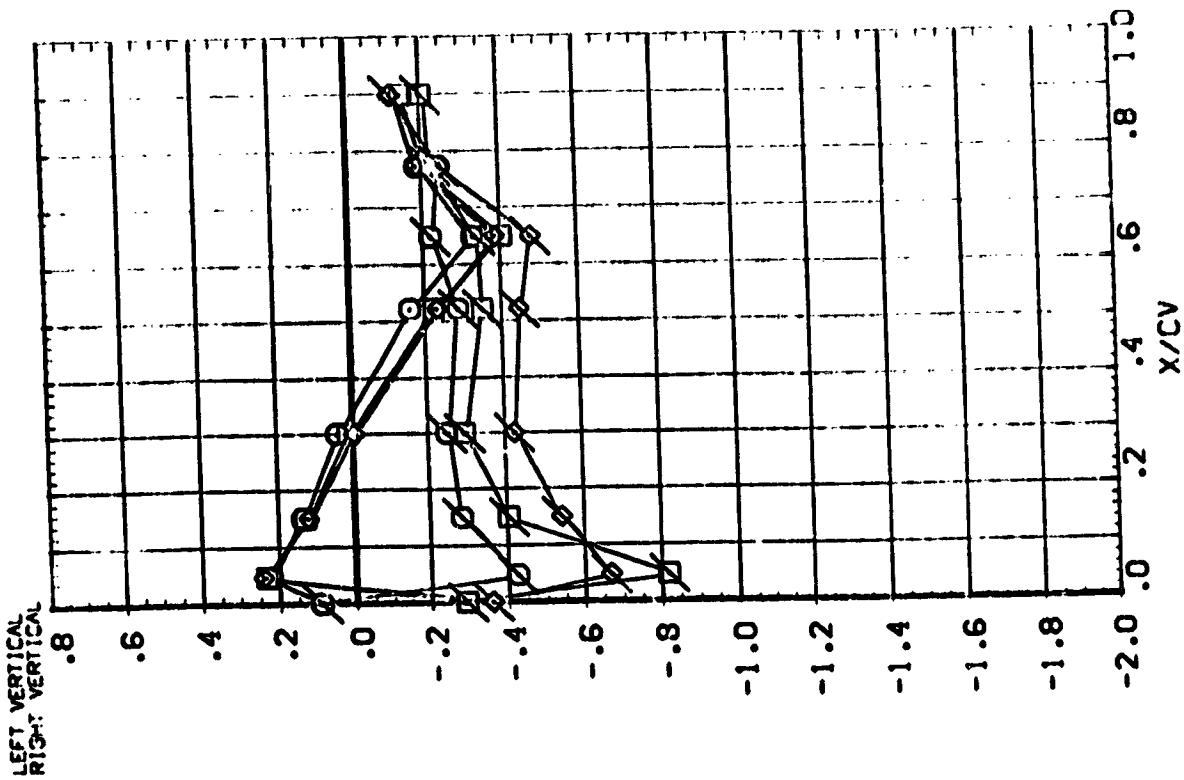


93

PARAMETRIC VALUES
ALPHA
ELEVON

.000
.000
.000

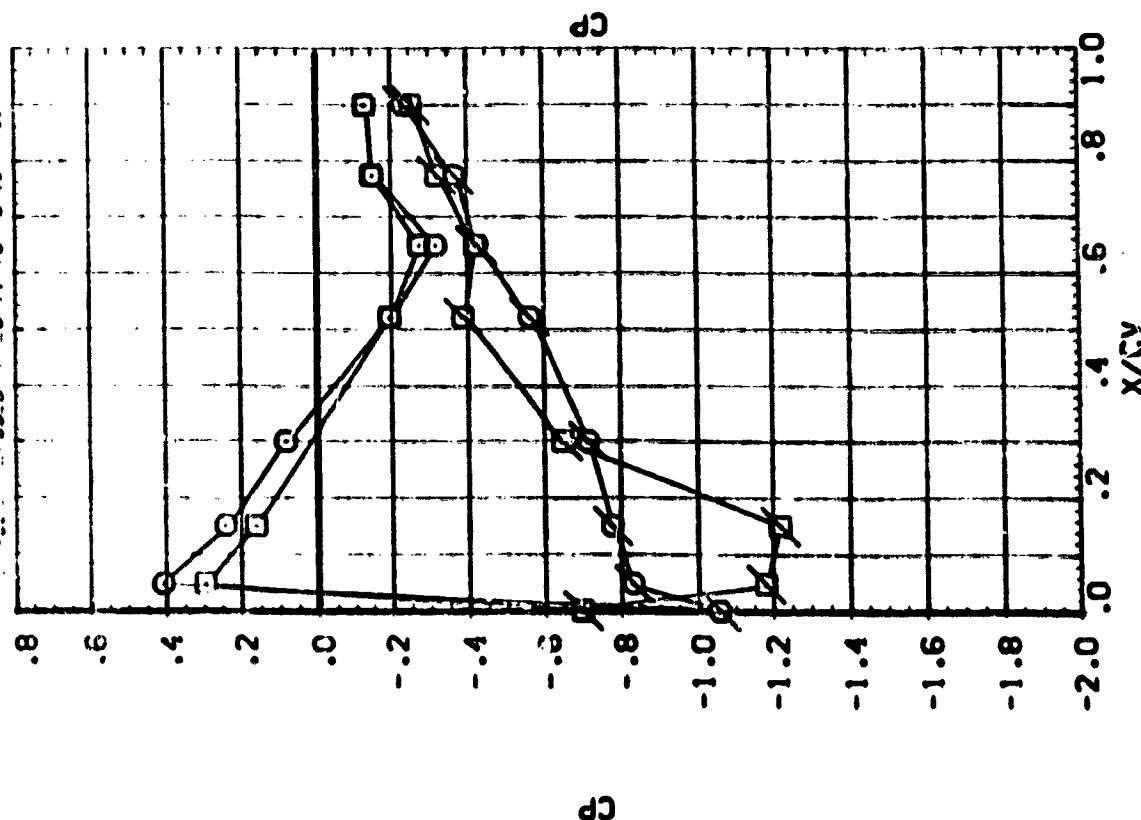
.000
.000
.000



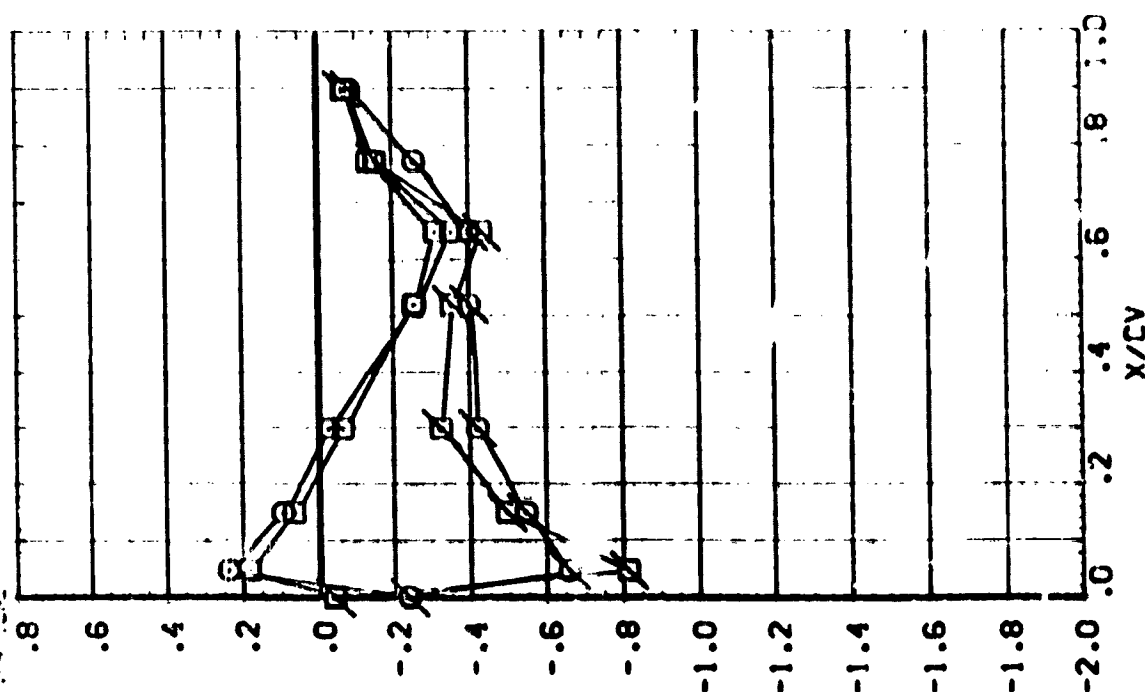
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

三

5-22-68
5-23-68
5-24-68
5-25-68
5-26-68
5-27-68
5-28-68
5-29-68
5-30-68
5-31-68
6-1-68
6-2-68
6-3-68
6-4-68
6-5-68
6-6-68
6-7-68
6-8-68
6-9-68
6-10-68
6-11-68
6-12-68
6-13-68
6-14-68
6-15-68
6-16-68
6-17-68
6-18-68
6-19-68
6-20-68
6-21-68
6-22-68
6-23-68
6-24-68
6-25-68
6-26-68
6-27-68
6-28-68
6-29-68
6-30-68
7-1-68
7-2-68
7-3-68
7-4-68
7-5-68
7-6-68
7-7-68
7-8-68
7-9-68
7-10-68
7-11-68
7-12-68
7-13-68
7-14-68
7-15-68
7-16-68
7-17-68
7-18-68
7-19-68
7-20-68
7-21-68
7-22-68
7-23-68
7-24-68
7-25-68
7-26-68
7-27-68
7-28-68
7-29-68
7-30-68
7-31-68
8-1-68
8-2-68
8-3-68
8-4-68
8-5-68
8-6-68
8-7-68
8-8-68
8-9-68
8-10-68
8-11-68
8-12-68
8-13-68
8-14-68
8-15-68
8-16-68
8-17-68
8-18-68
8-19-68
8-20-68
8-21-68
8-22-68
8-23-68
8-24-68
8-25-68
8-26-68
8-27-68
8-28-68
8-29-68
8-30-68
8-31-68
9-1-68
9-2-68
9-3-68
9-4-68
9-5-68
9-6-68
9-7-68
9-8-68
9-9-68
9-10-68
9-11-68
9-12-68
9-13-68
9-14-68
9-15-68
9-16-68
9-17-68
9-18-68
9-19-68
9-20-68
9-21-68
9-22-68
9-23-68
9-24-68
9-25-68
9-26-68
9-27-68
9-28-68
9-29-68
9-30-68
10-1-68
10-2-68
10-3-68
10-4-68
10-5-68
10-6-68
10-7-68
10-8-68
10-9-68
10-10-68
10-11-68
10-12-68
10-13-68
10-14-68
10-15-68
10-16-68
10-17-68
10-18-68
10-19-68
10-20-68
10-21-68
10-22-68
10-23-68
10-24-68
10-25-68
10-26-68
10-27-68
10-28-68
10-29-68
10-30-68
10-31-68
11-1-68
11-2-68
11-3-68
11-4-68
11-5-68
11-6-68
11-7-68
11-8-68
11-9-68
11-10-68
11-11-68
11-12-68
11-13-68
11-14-68
11-15-68
11-16-68
11-17-68
11-18-68
11-19-68
11-20-68
11-21-68
11-22-68
11-23-68
11-24-68
11-25-68
11-26-68
11-27-68
11-28-68
11-29-68
11-30-68
12-1-68
12-2-68
12-3-68
12-4-68
12-5-68
12-6-68
12-7-68
12-8-68
12-9-68
12-10-68
12-11-68
12-12-68
12-13-68
12-14-68
12-15-68
12-16-68
12-17-68
12-18-68
12-19-68
12-20-68
12-21-68
12-22-68
12-23-68
12-24-68
12-25-68
12-26-68
12-27-68
12-28-68
12-29-68
12-30-68
12-31-68

[illegible]

1997



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES



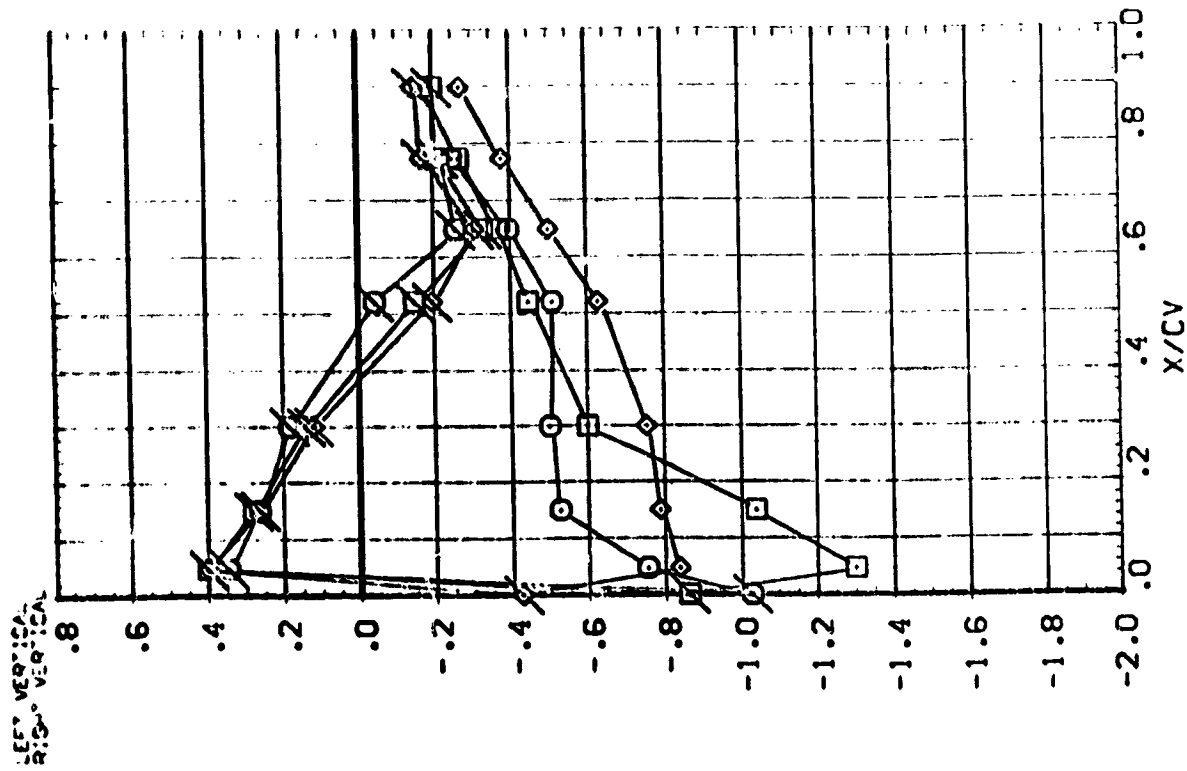
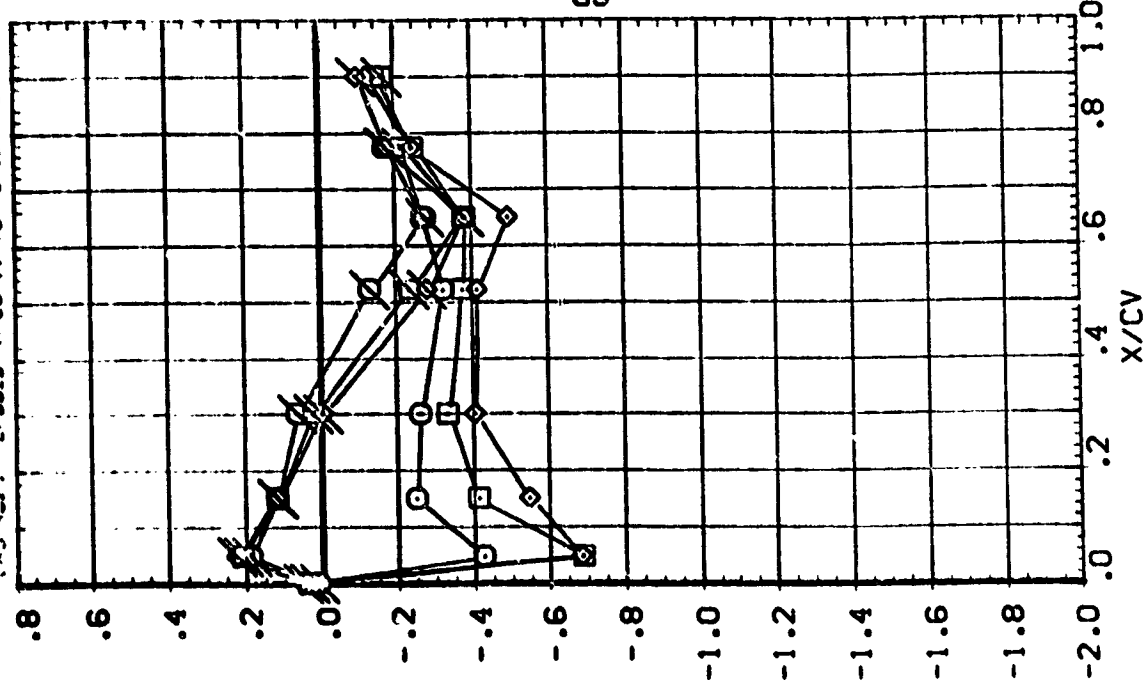
SYNCH 2/8V .158
 .316
 .600

SECA 5.23C
 12.37C

MACH .598

PARAMETRIC VALUES
 ALPHA .000
 ELEV .000
 RADIUS .000

DATA SET SYMBO CONFIGURATION DESCRIPTION
 (REFLECT) OPEN ANGES 11-707 OA12 OA2A
 (REFLECT) FLASSED ANGES 11-707 OA12 OA2A



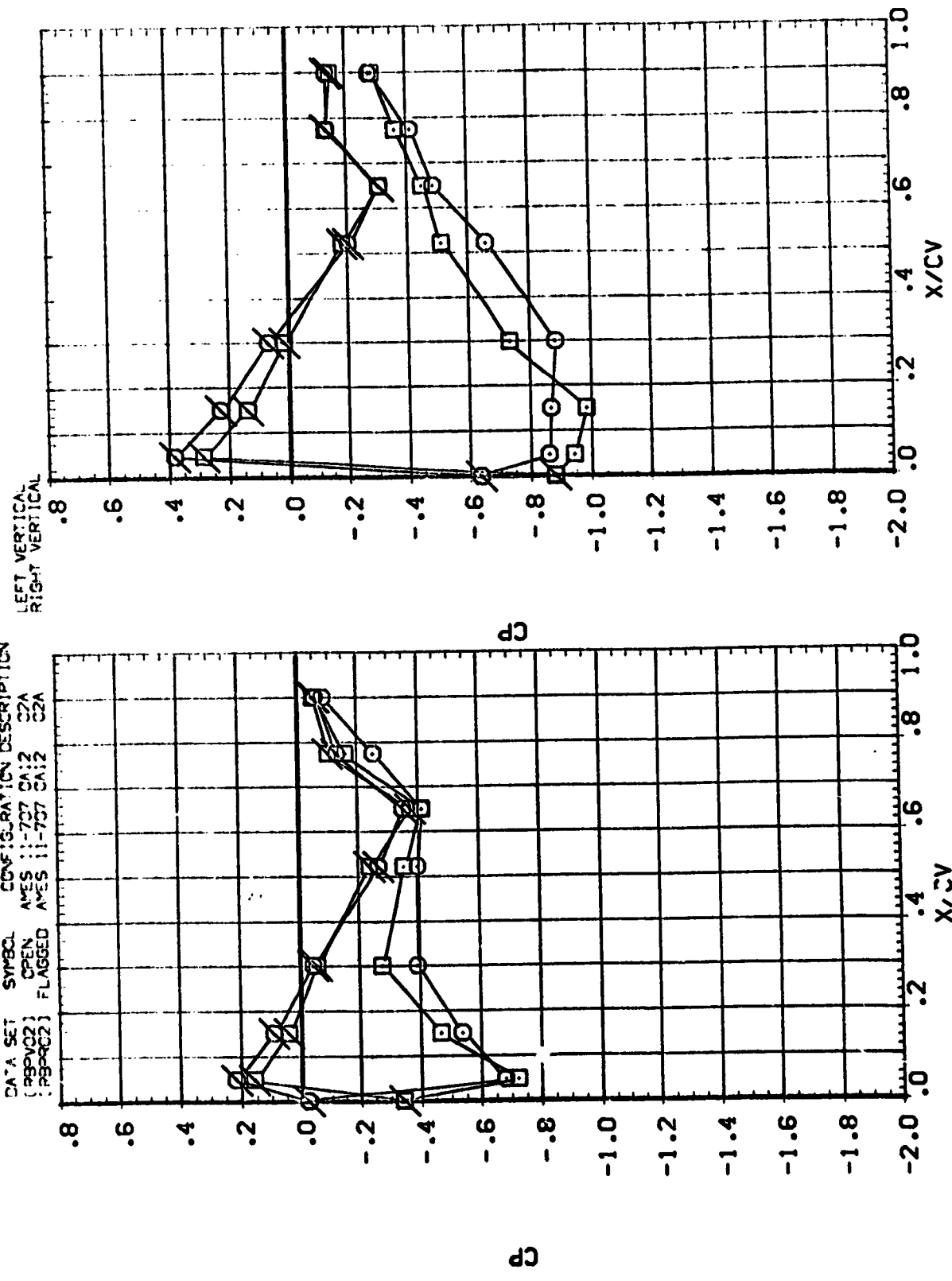
CHRONWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

DYNAMIC VALUES
 1000 1000 1000
 1000 1000 1000
 1000 1000 1000

ALPHA
 ELEVON

SYMBOL Z/BY BETA MACH
 .84C 5.230 .598
 .925 10.370

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (PBPVQ2) OPEN AMES 11-737 CA12 C2A
 (PBPVQ2) FLAGGED AMES 11-737 CA12 C2A



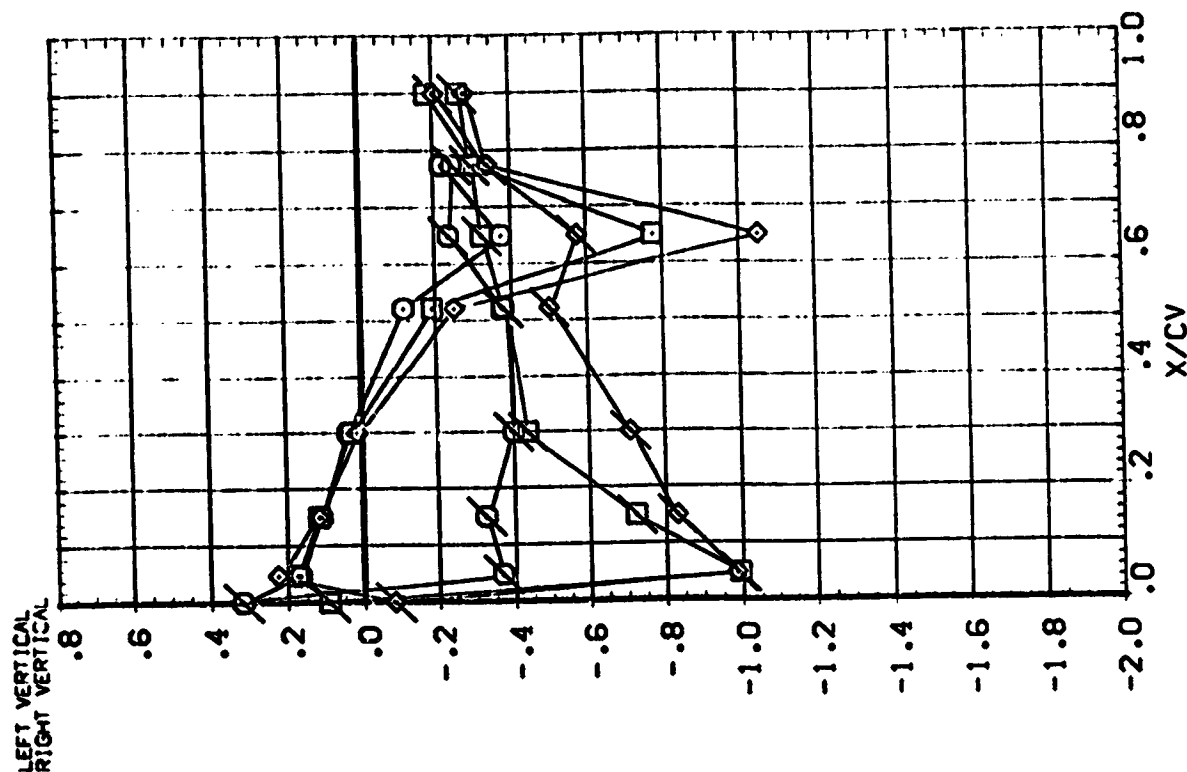
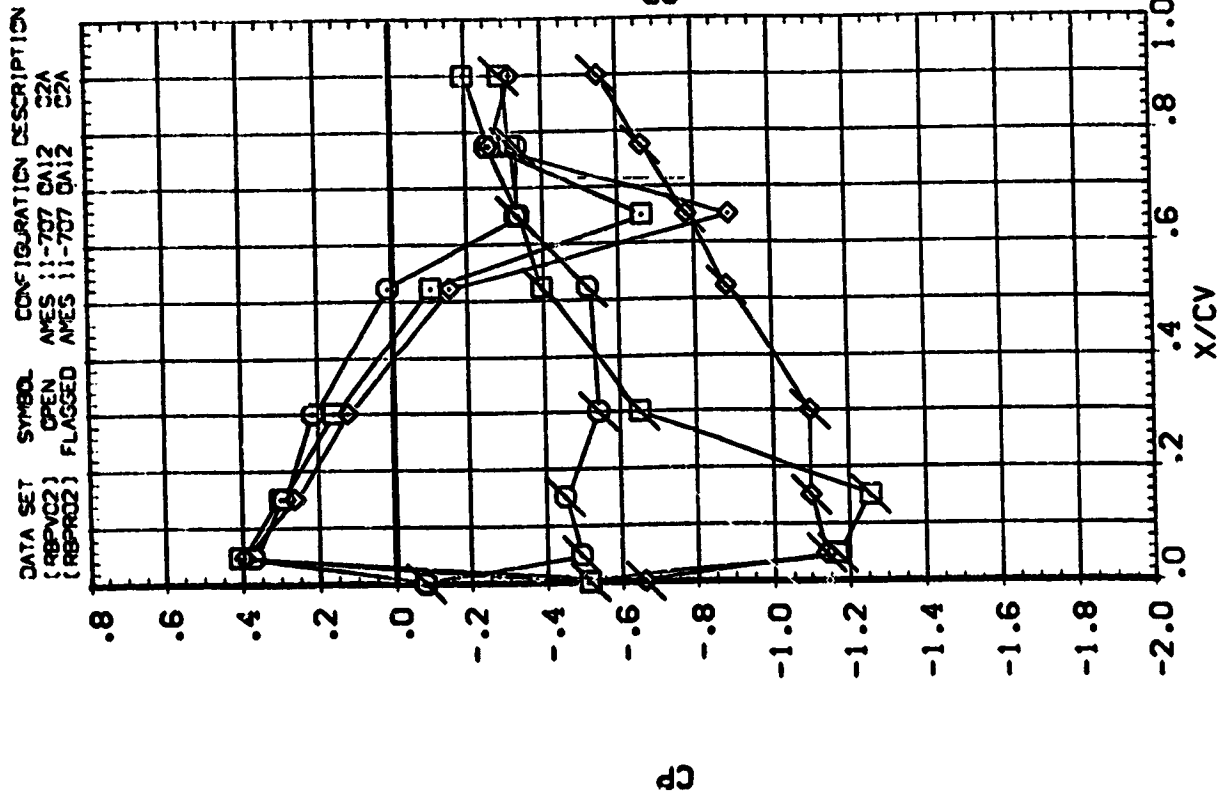
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

5-2



SYMBOL Z/βV BETA MACH
 ○ .158 -10.150 .904
 □ .316 -5.040
 ◇ .633

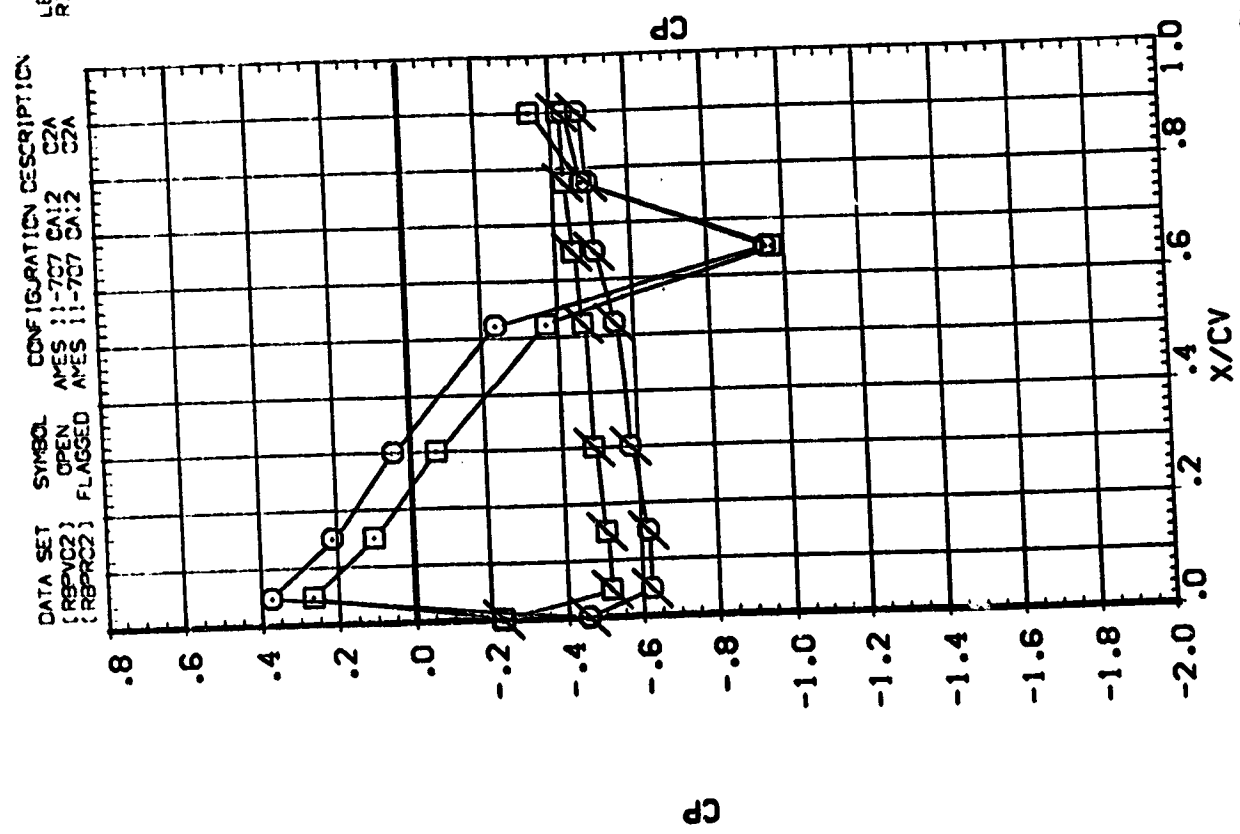
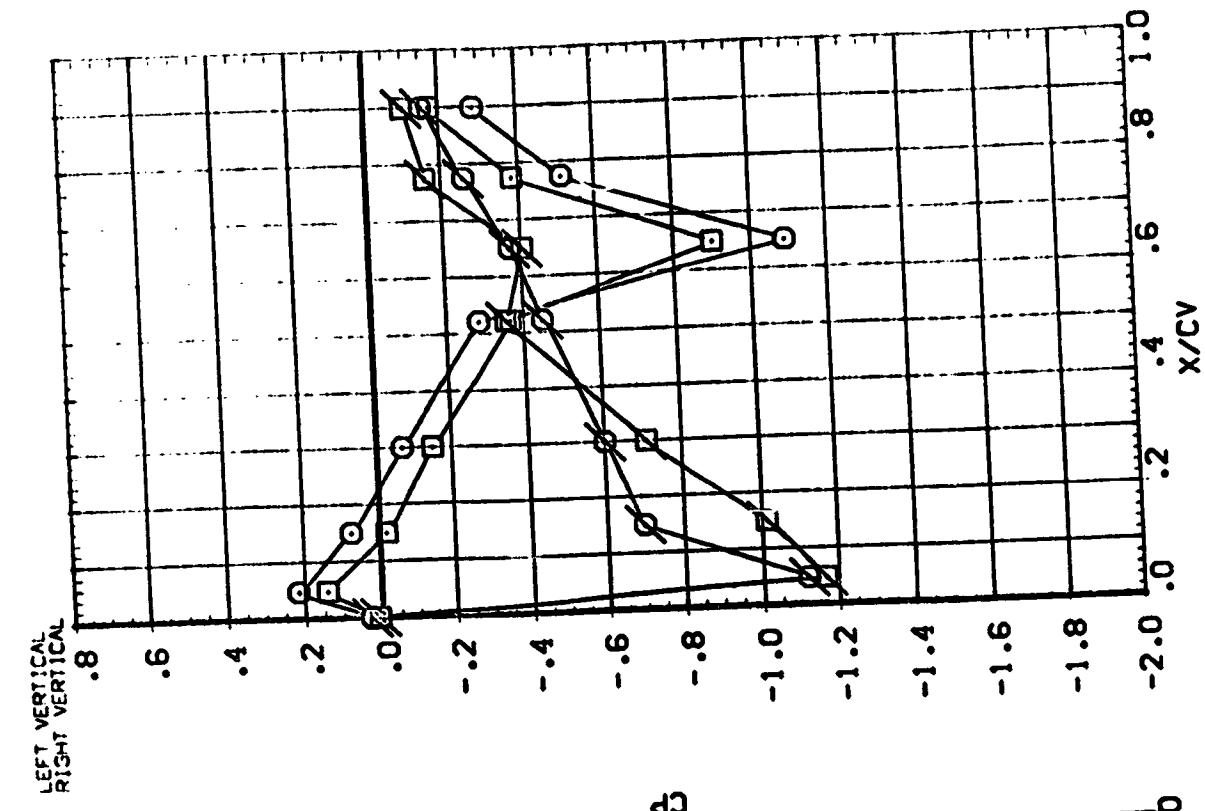
PARAMETRIC VALUES
 ALPHA .000
 ELEVON .000
 RUDDER .000
 RUFLER .000



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 ALPHA .000
 BETA .000
 ELEVON .000
 RUDDER .000

SYMBOL Z/BV BETA MACH
 .84C -10.150 .904
 .925 -5.040



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES



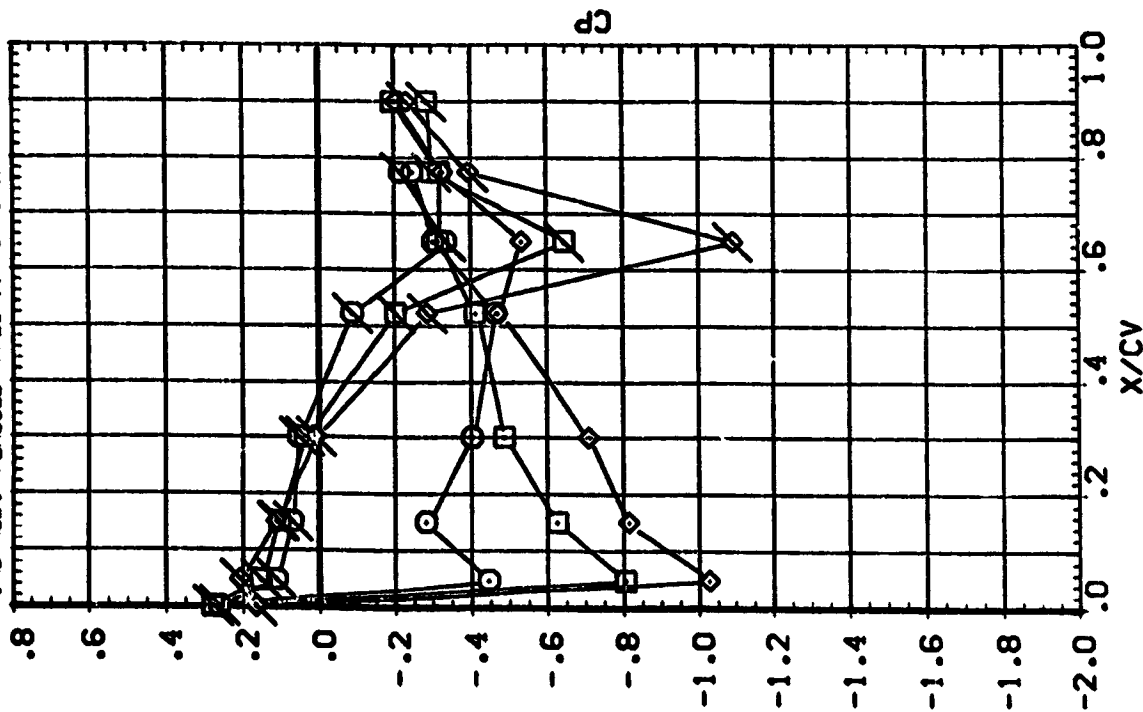
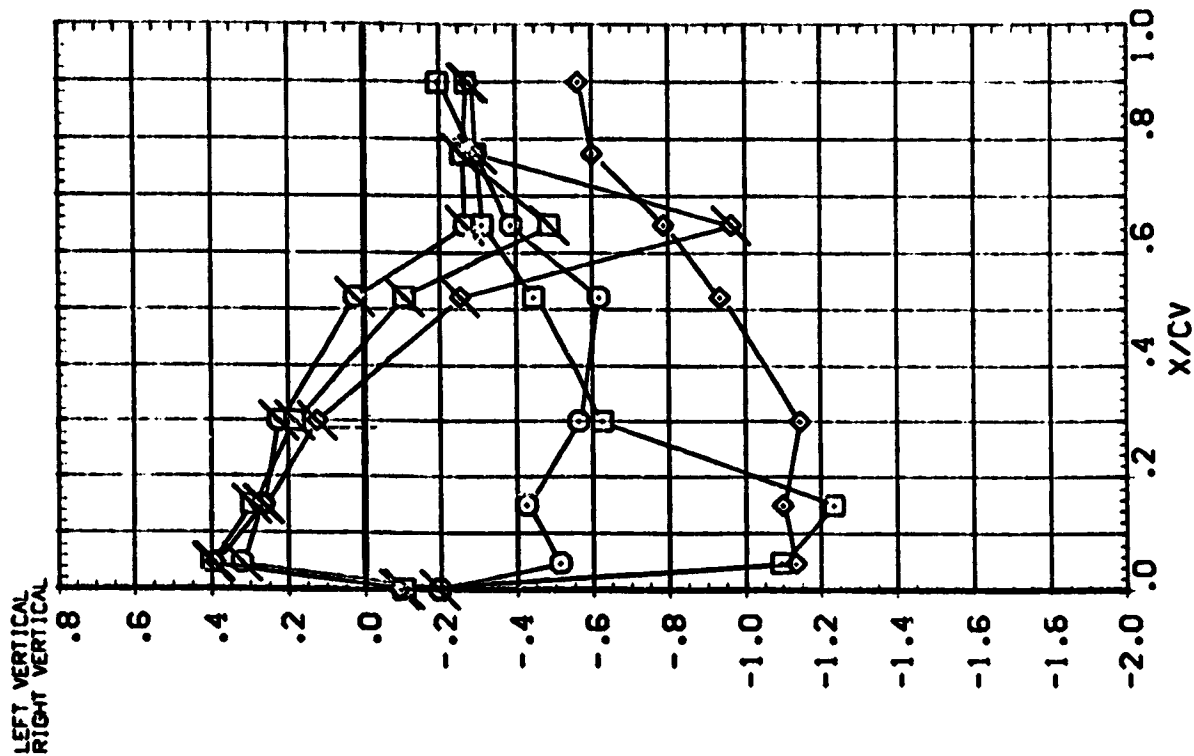
SYMBOL Z/BV
 ○ .158
 □ .316
 ◇ .600

BETA
 5.250
 10.500

MACH
 .904

PARAMETRIC VALLES
 ALPHA .000
 ELEVON .000
 RUDDER .000
 RUOFLR .000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REPVO2) OPEN ANES 11-707 OA12 O2A
 (REPVO2) FLAGGED ANES 11-707 OA12 O2A



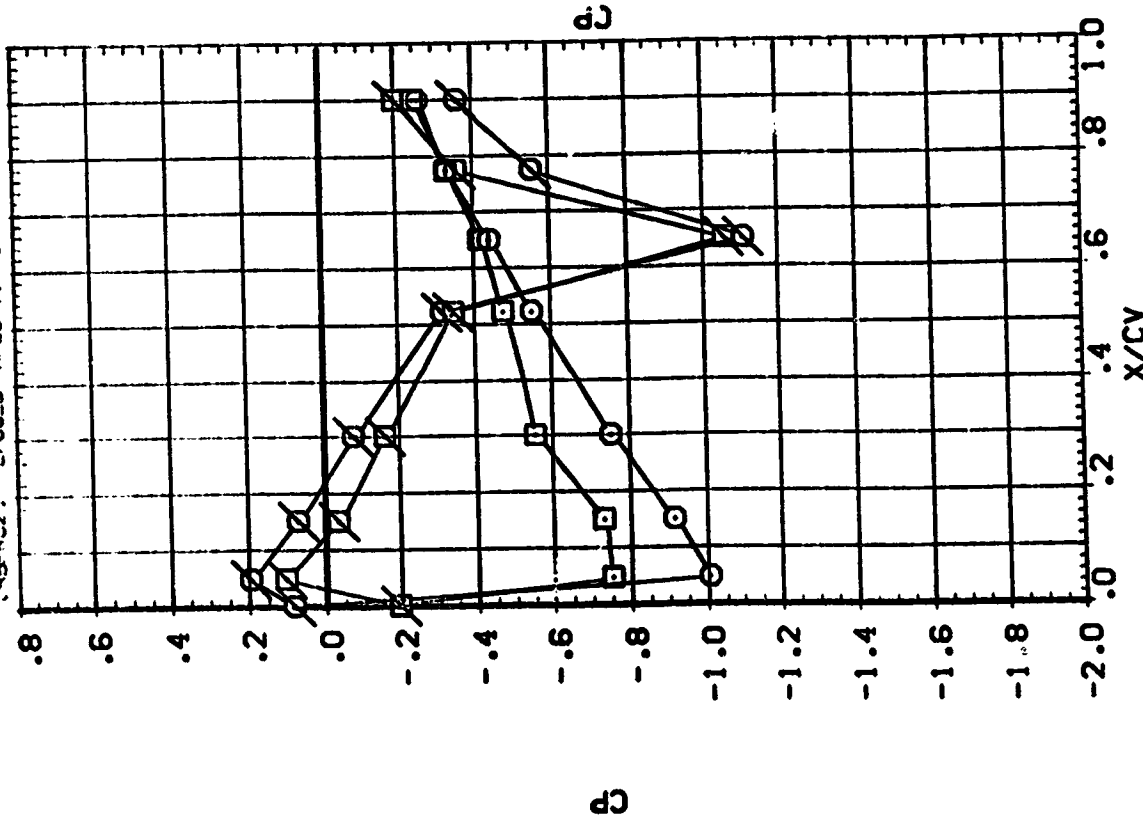
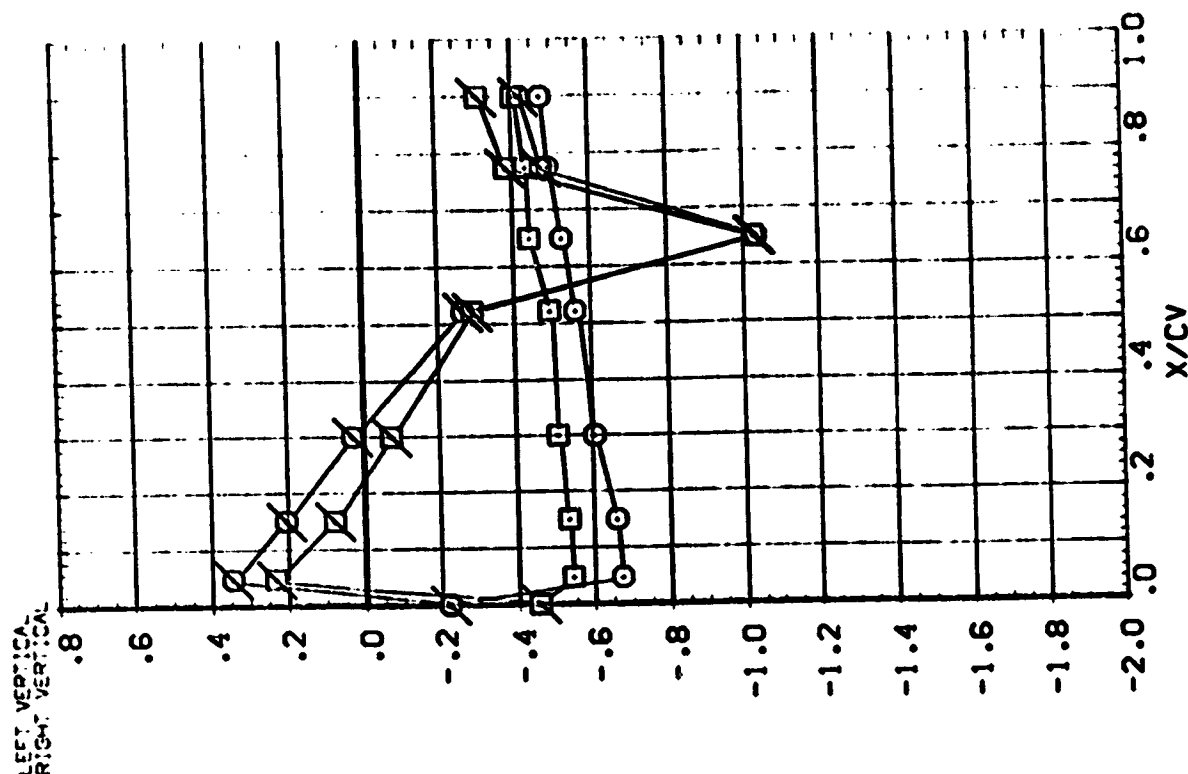
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 .000 R000P
 .000 R000P

ALPHA
 ELEVON

SYMBOL Z/BV BETA WAC
 .840 .904
 .925 10.500

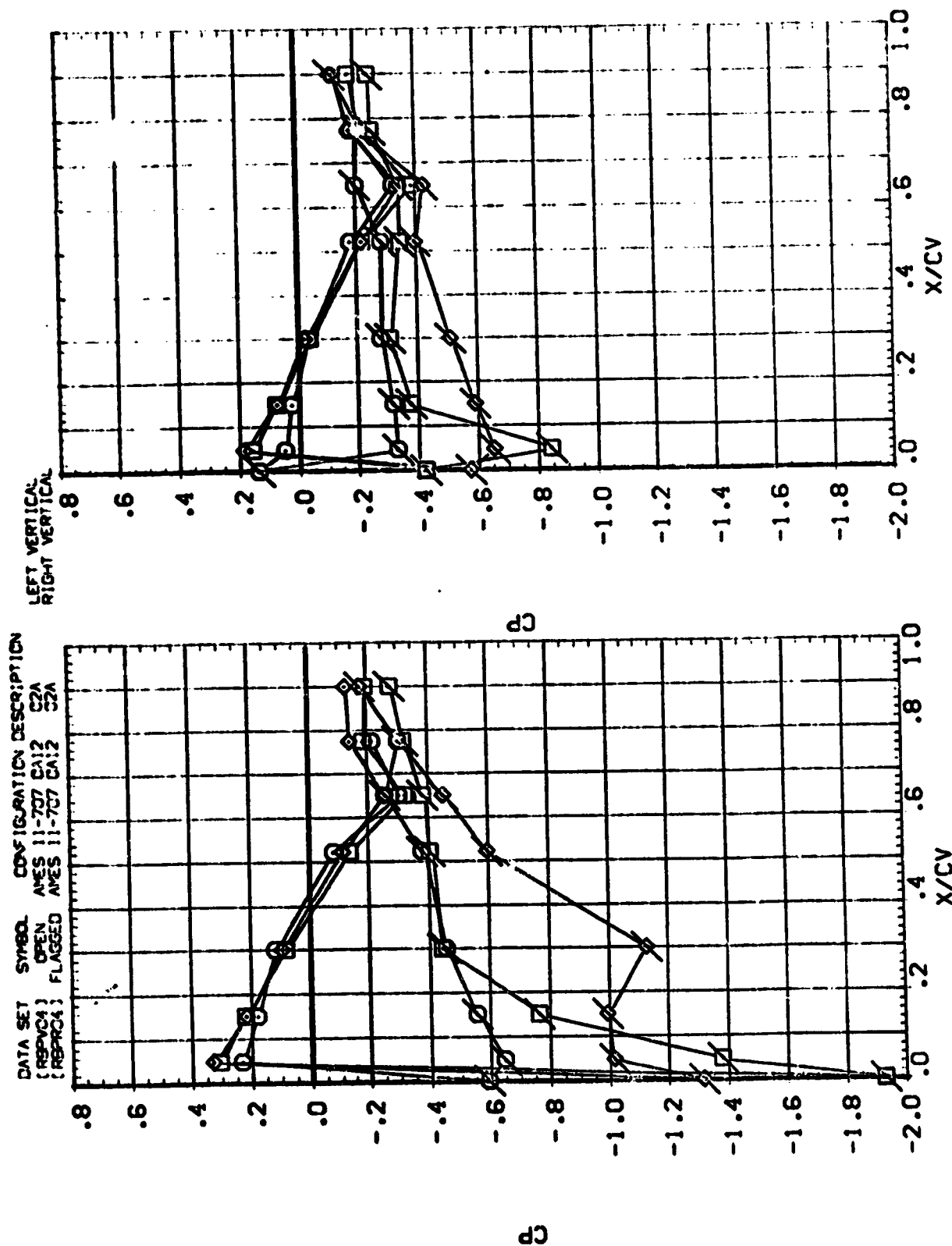
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 :RBPV02: OPEN ARES 11-707 OA12 C2A
 :RBPV02: FLAGGED ARES 11-707 OA12 C2A



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

BE'A	MACH
-13.110	.598
-5.020	

PARAMETRIC VALUES	
ALPHA	0.000
ELEVATION	0.000
RUMBER	0.000
RUMFLR	0.000

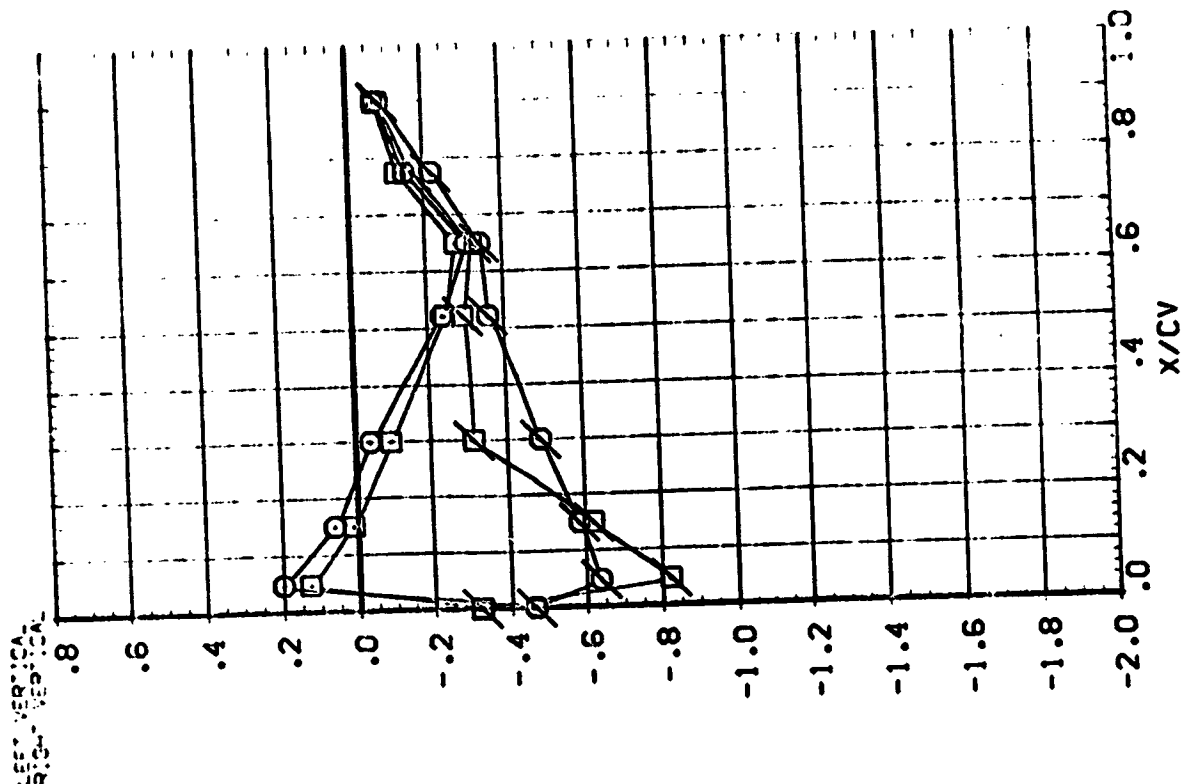
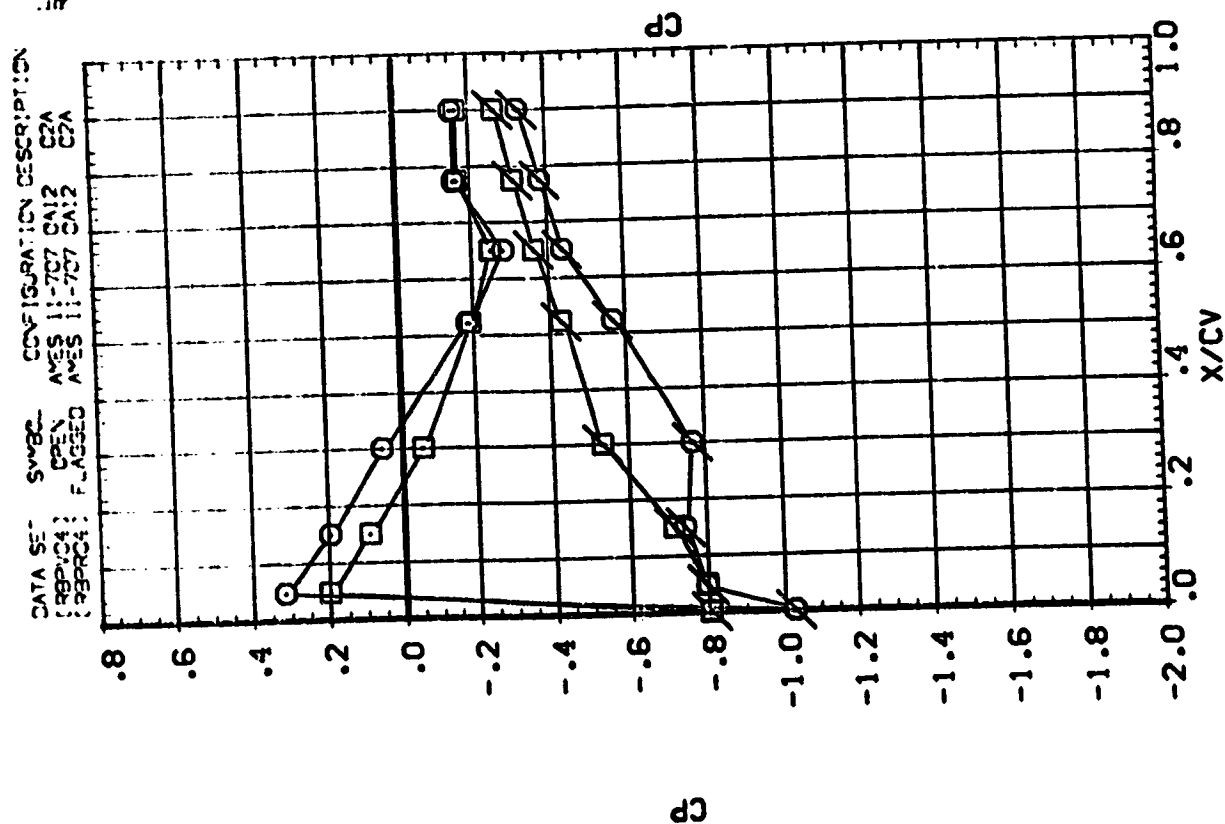


CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES



SYNCH 7/8V .84C .925
BETA -10.110
VACH .598

ALPHA
ELEVON
10.000
10.000
10.000

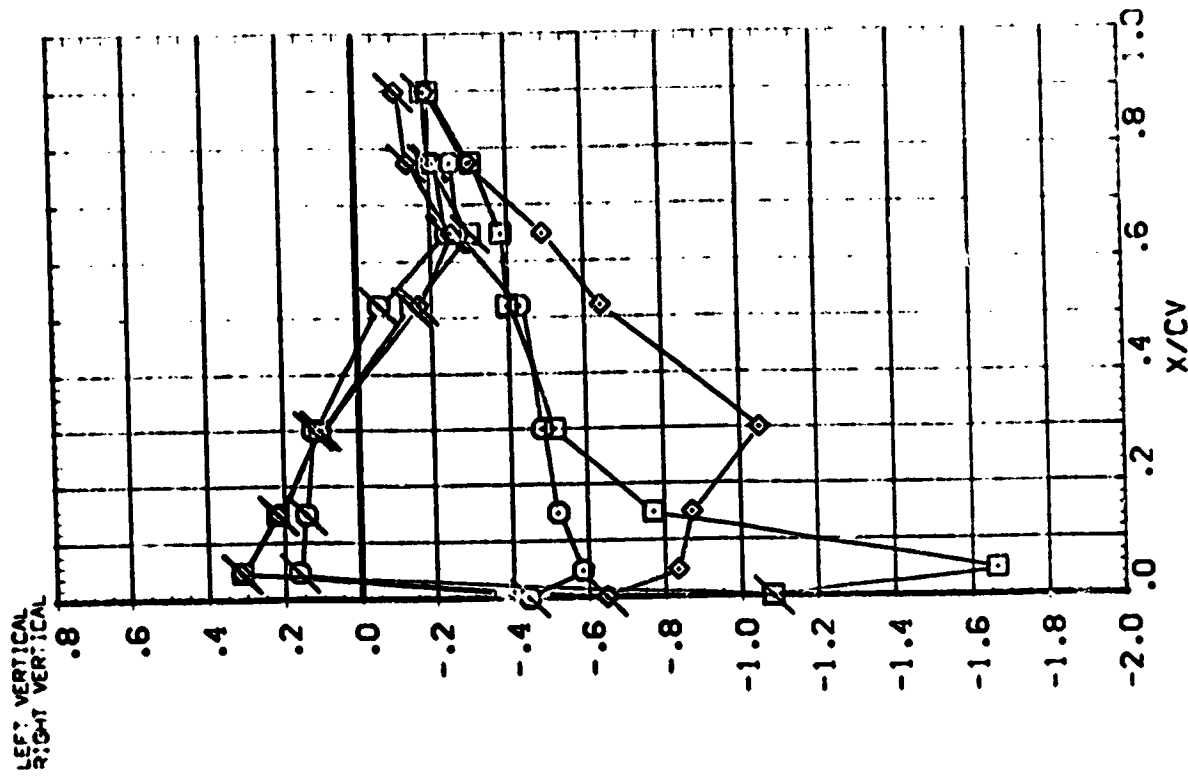
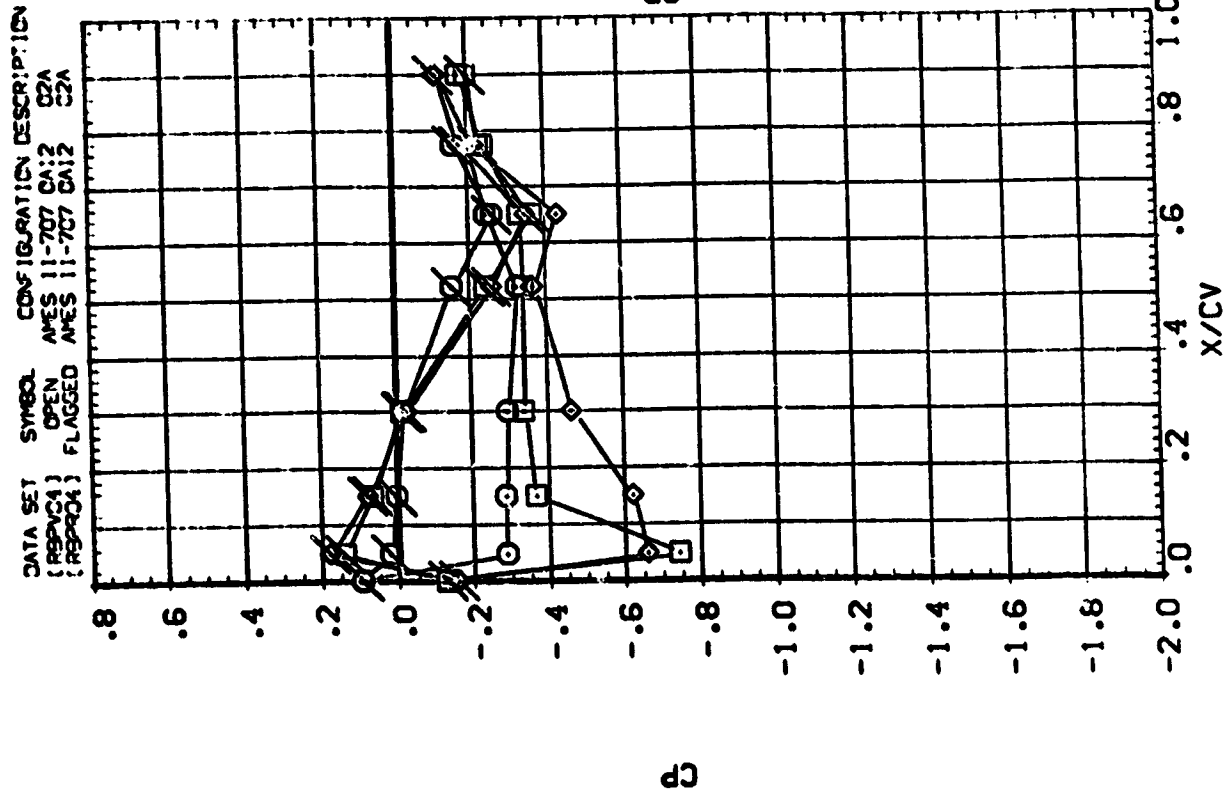


CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES



SYMBOL Z/BV BETA MACH
 .158 5.170 .598
 .316 10.270
 .600

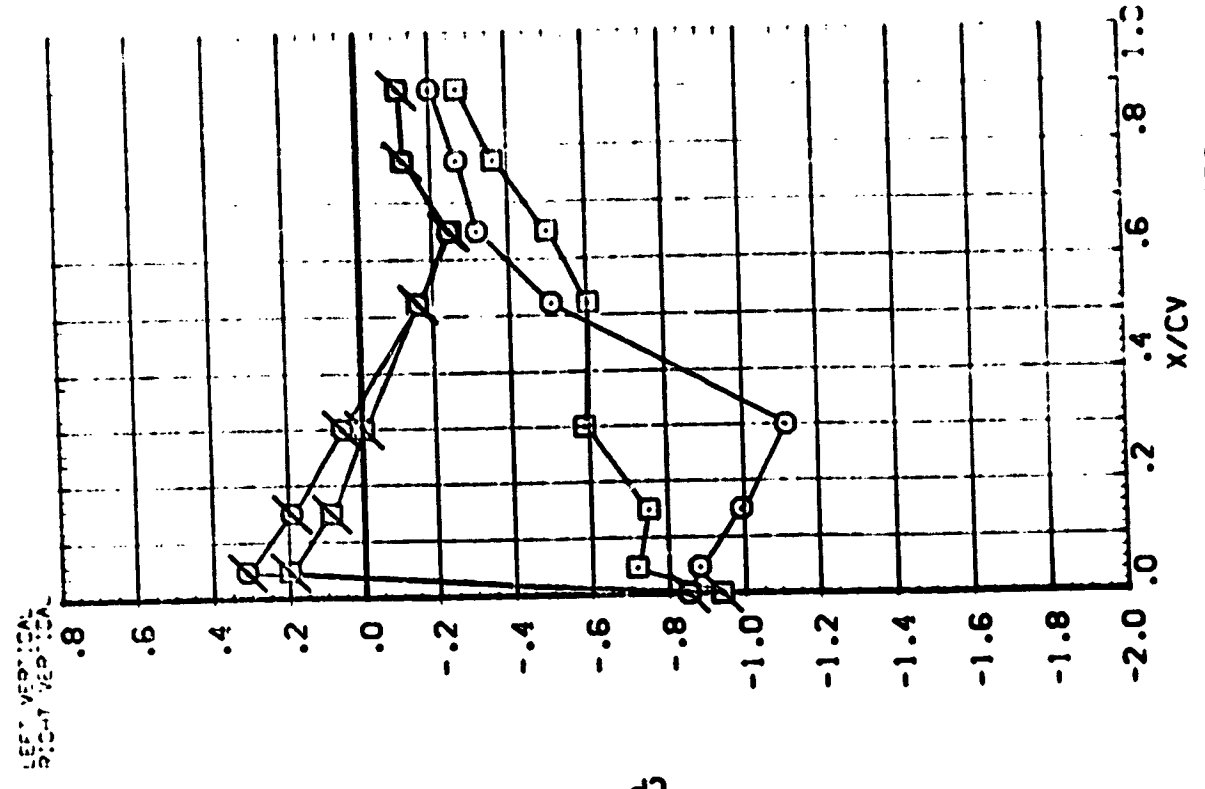
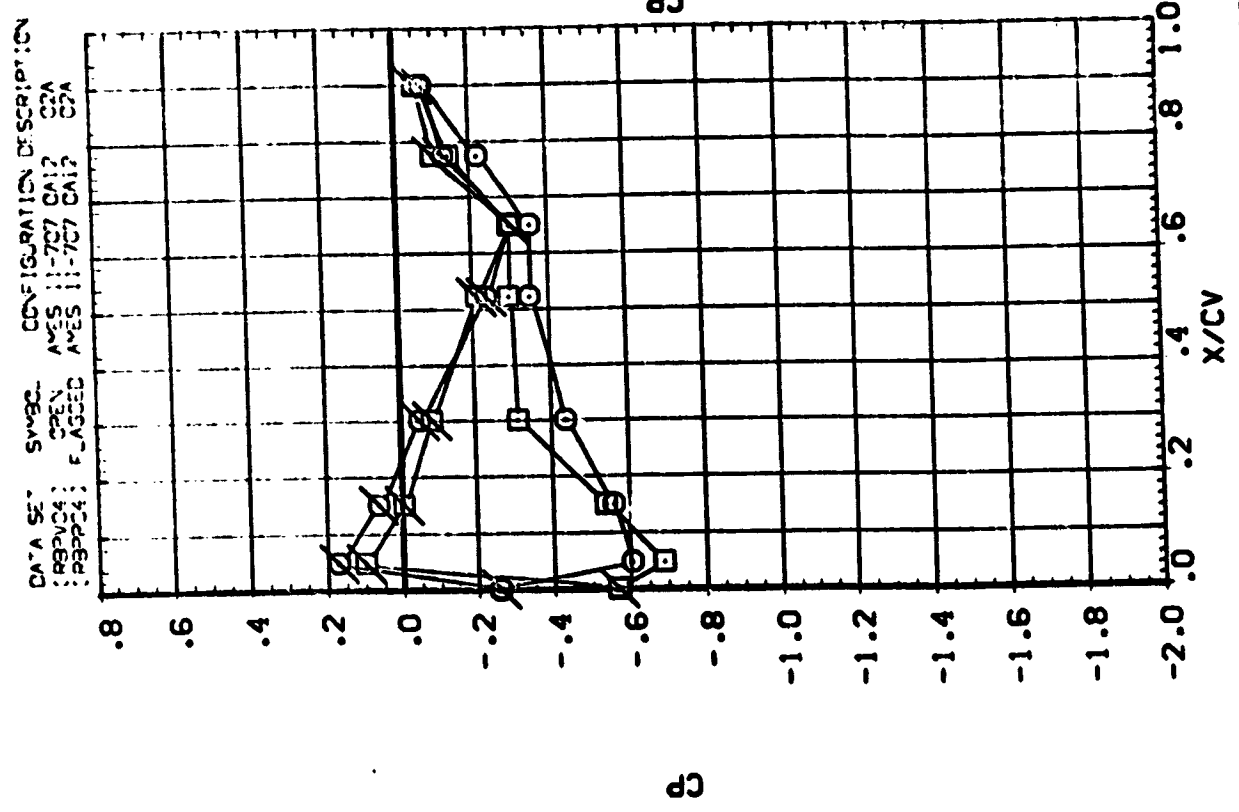
PARAMETER VALUES
 ALPHA 10.000
 ELEVON 10.000
 10.000
 10.000



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

SYNOPSIS: Z/BV .84C .975
 BETA 5.17C 10.27C
 MACH .598

ALPHA 10.000 9.000 8.000
 ELEVON 1.000 2.000 3.000



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETER VALUES

ALPHA
ELEV

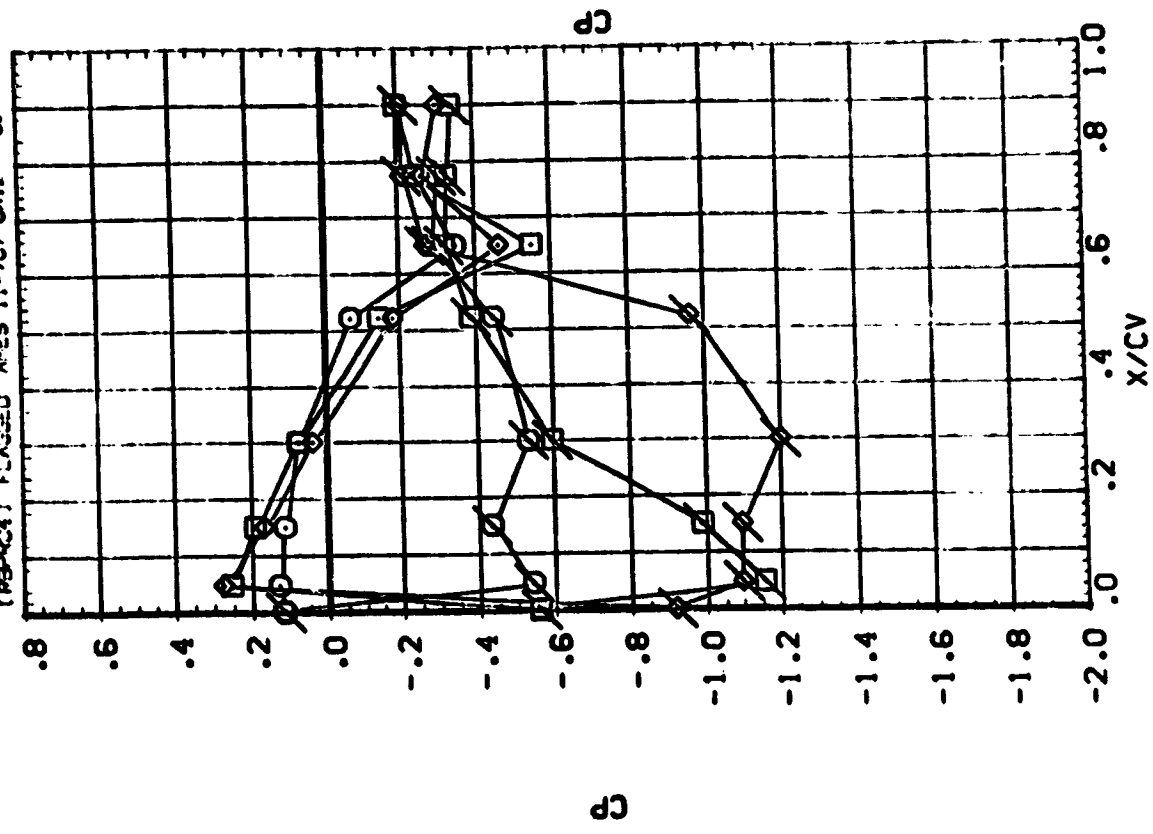
SYMBOL Z/BV BETA MAC

.158
.316
.600

-10.23C
-5.07C

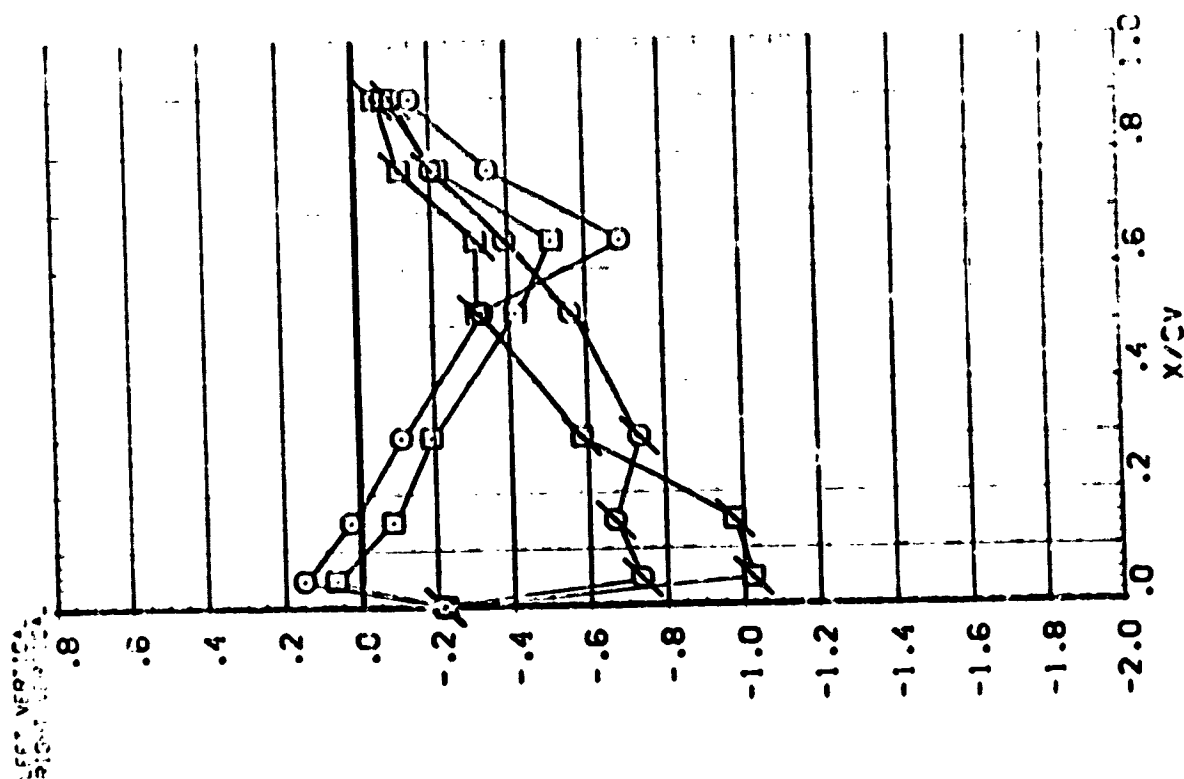
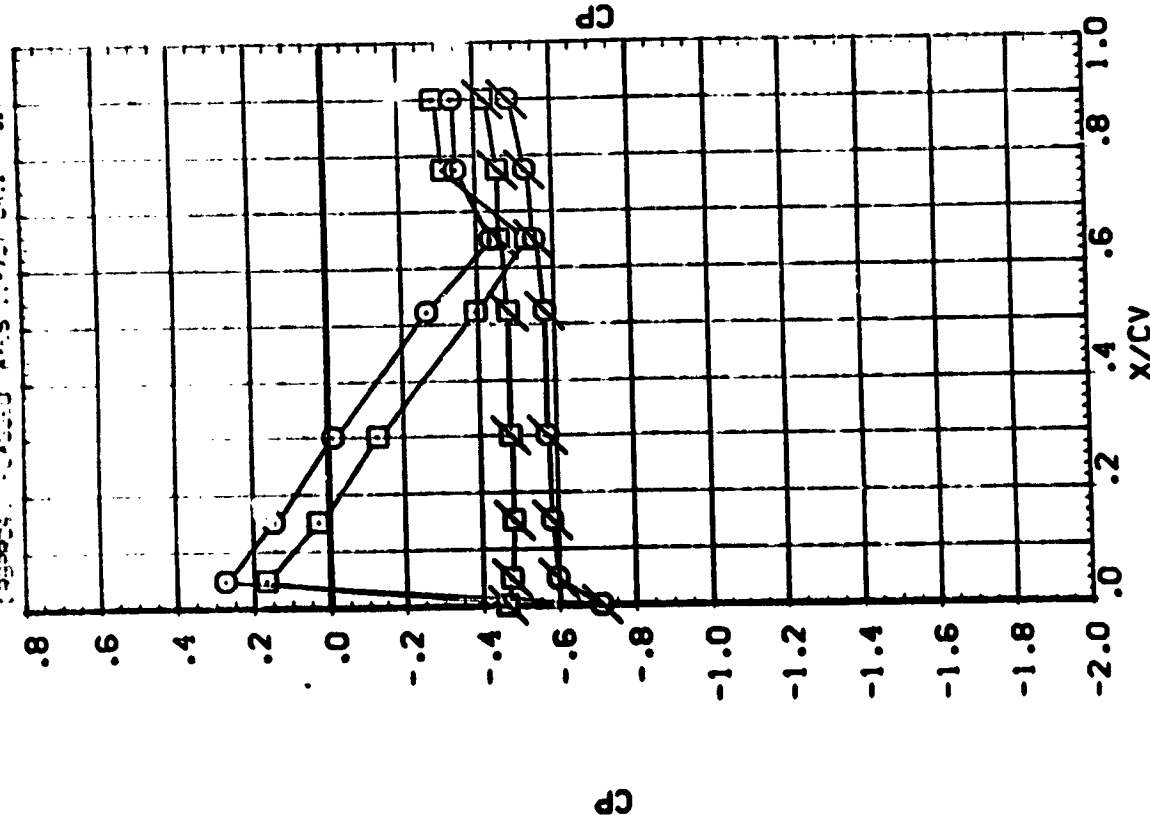
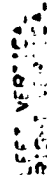
.902

DATA SET SYMBOL CONFIGURATION DESCRIPTION
[RBPUC4] OPEN AYES 11-707 QAI2 C2A
[RBPUC4] FLAGGED AYES 11-707 QAI2 C2A



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

1990



CHOROWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

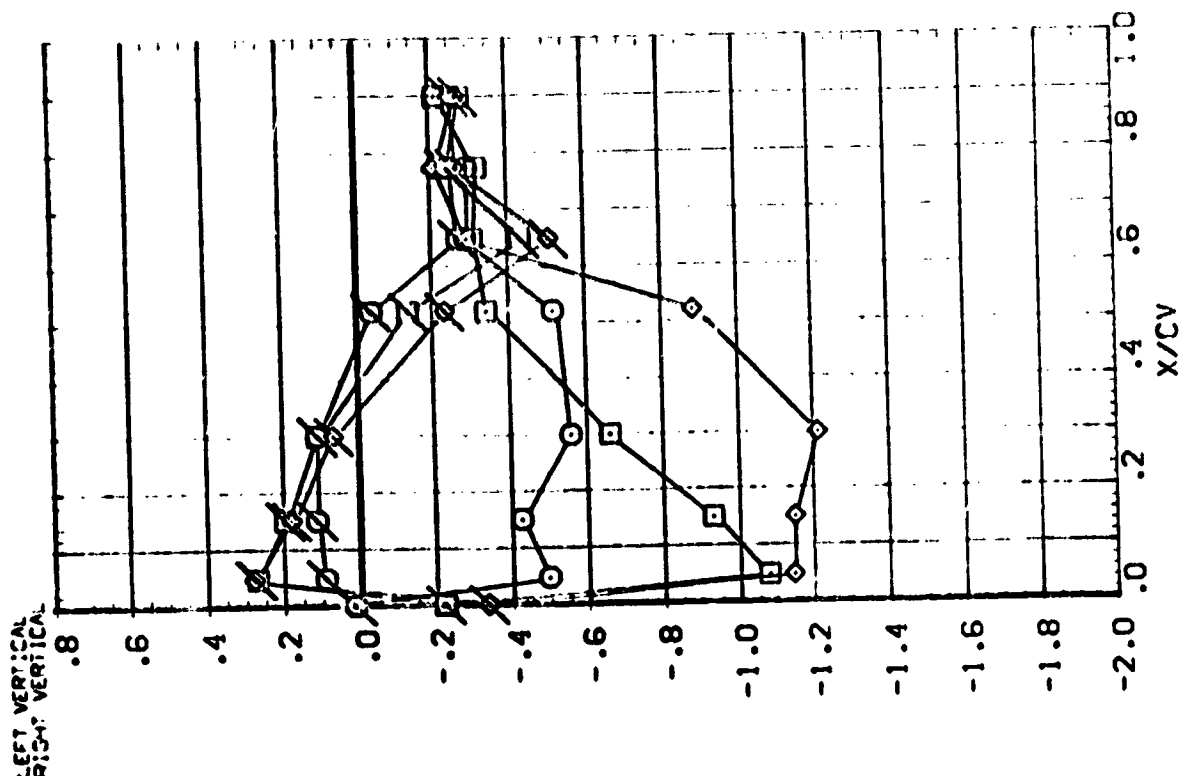
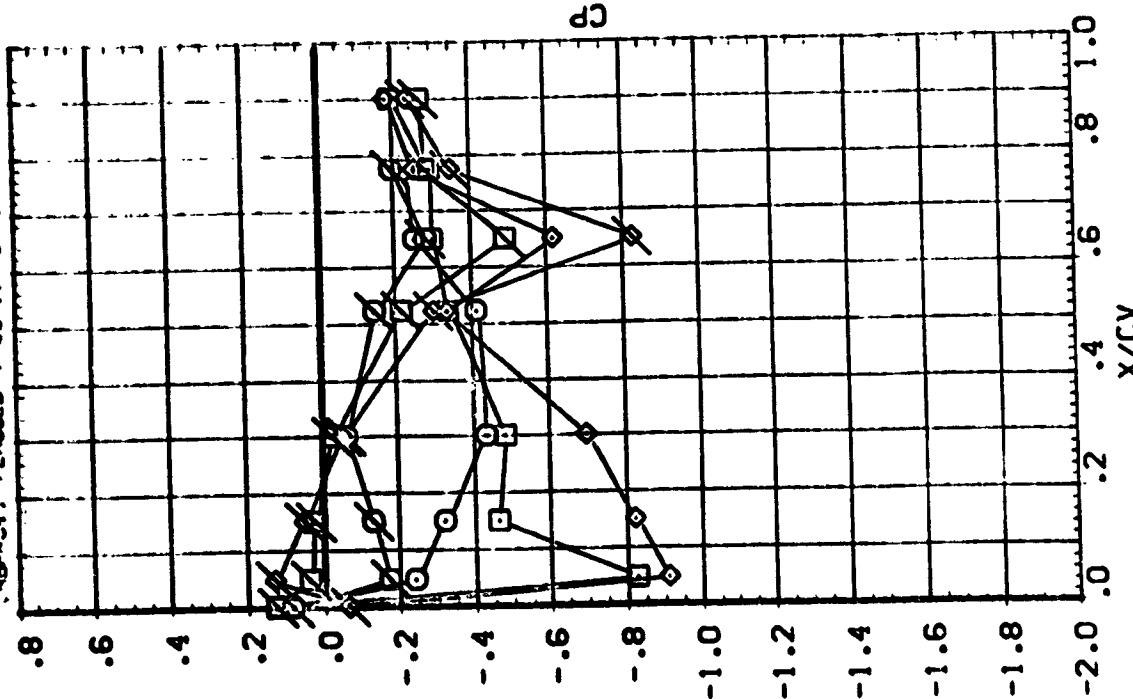
PARAMETER A-15
 10.000 2.000
 10.000 2.000

ALPHA
 ELEVON

BETA MACH
 5.230 .902
 10.390

SYMBOL Z/BN
 .150
 .316
 .600

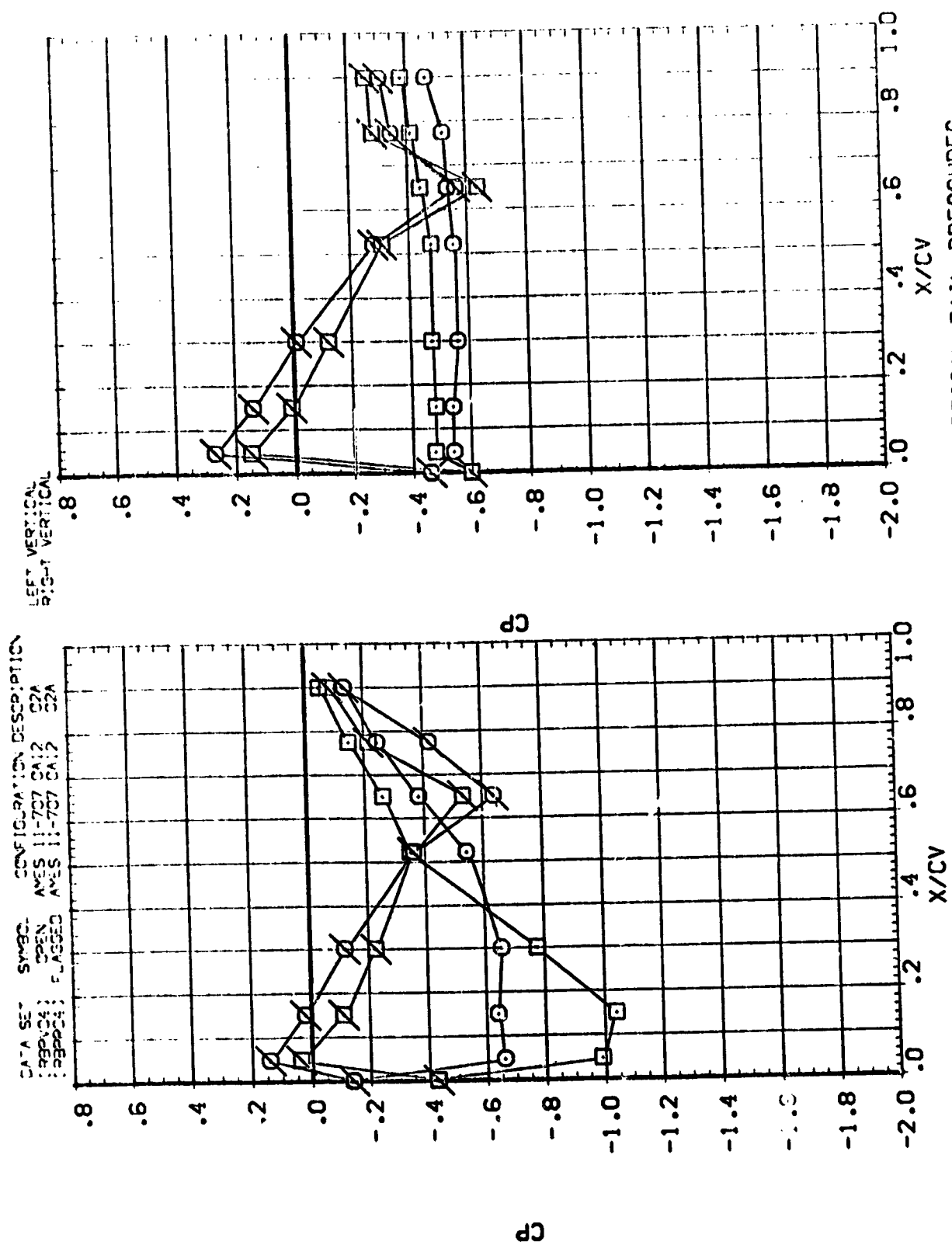
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RBPV4) OPEN ASES 11-757 CA13 22A
 (RBPV4) FLANGED ASES 11-757 CA13 22A



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

BOUNDARY VALUES
 ALPHA 10.000
 ELEV. 1000
 1000
 1000

SYMBO. Z/B. BETA MACH
 .840 .230 .902
 .575 10.390

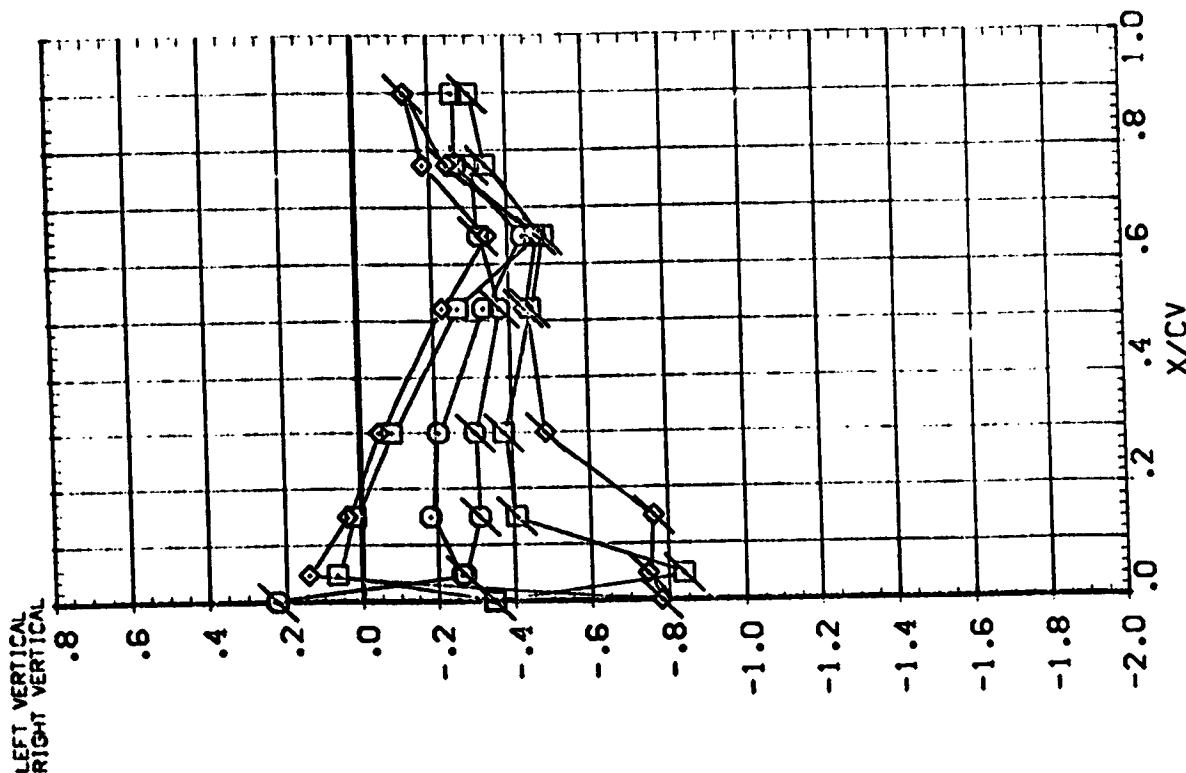
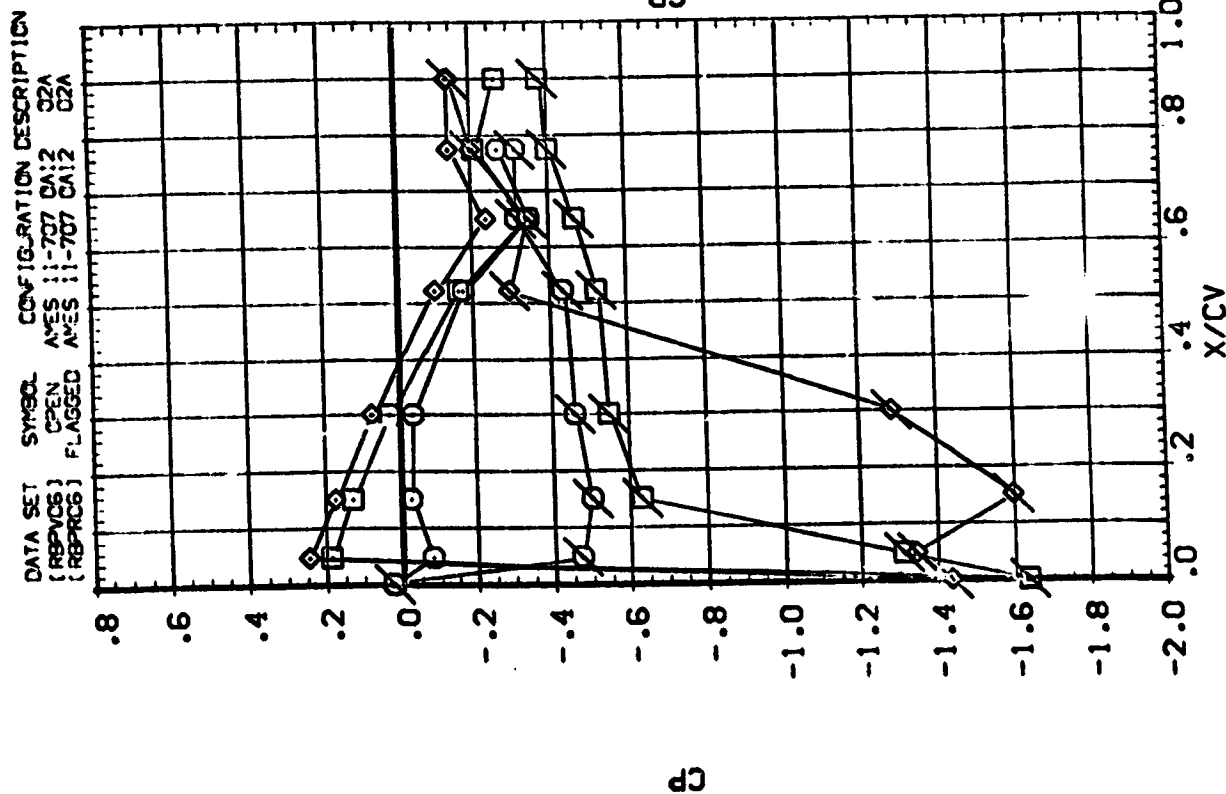




SYMBOL Z/BV
 .158
 .316
 .600

BETA MACH
 -10.030 .596
 -4.970

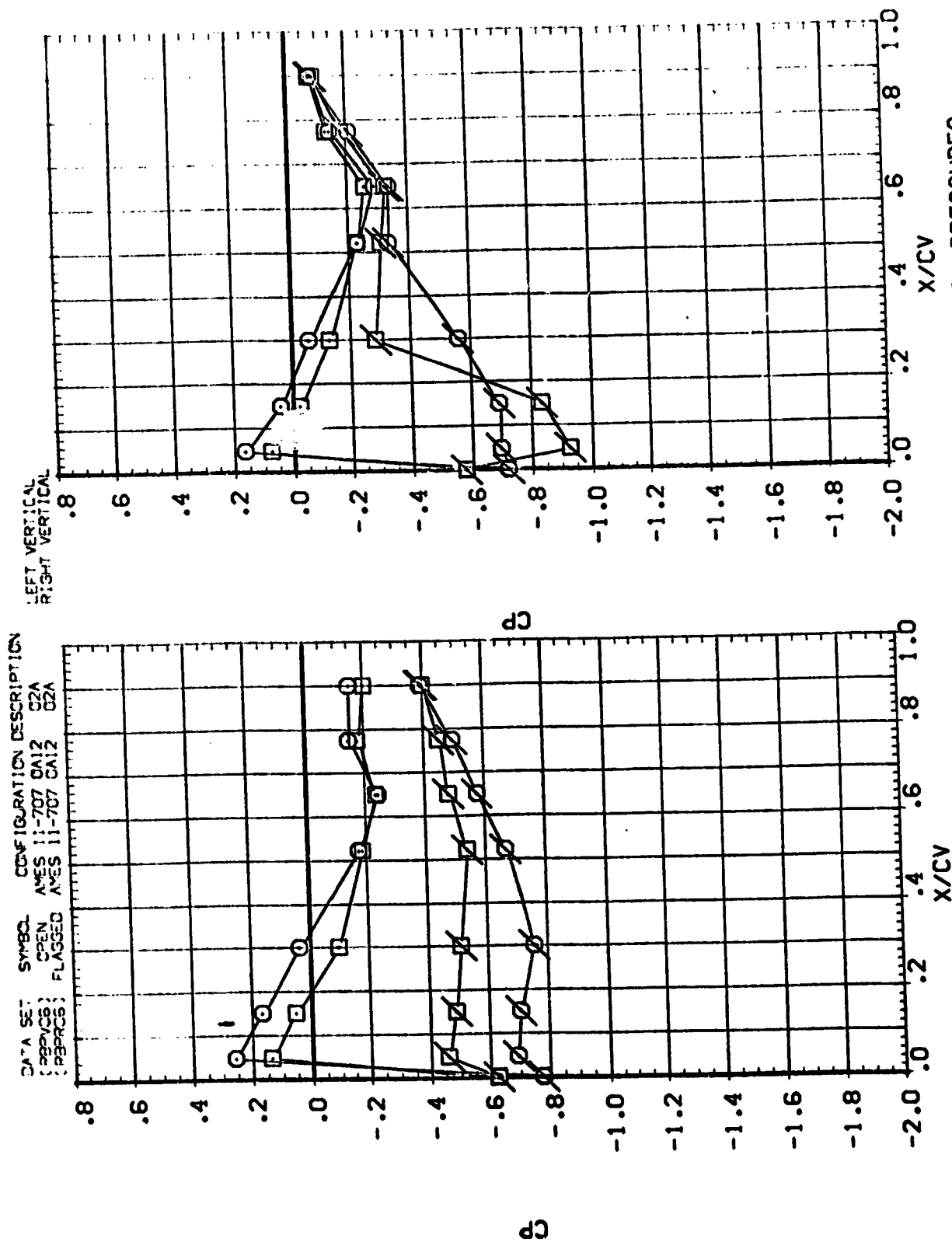
PARAMETRIC VALUES
 ALPHA 20.000
 ELEV .000
 RUDER .000
 RUFLR .000



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 ALPHA 20.000
 ELEVON .000
 PITCH .000

SYMBOL Z/BV BETA MACH
 .840 .030 .596
 .925 -4.970



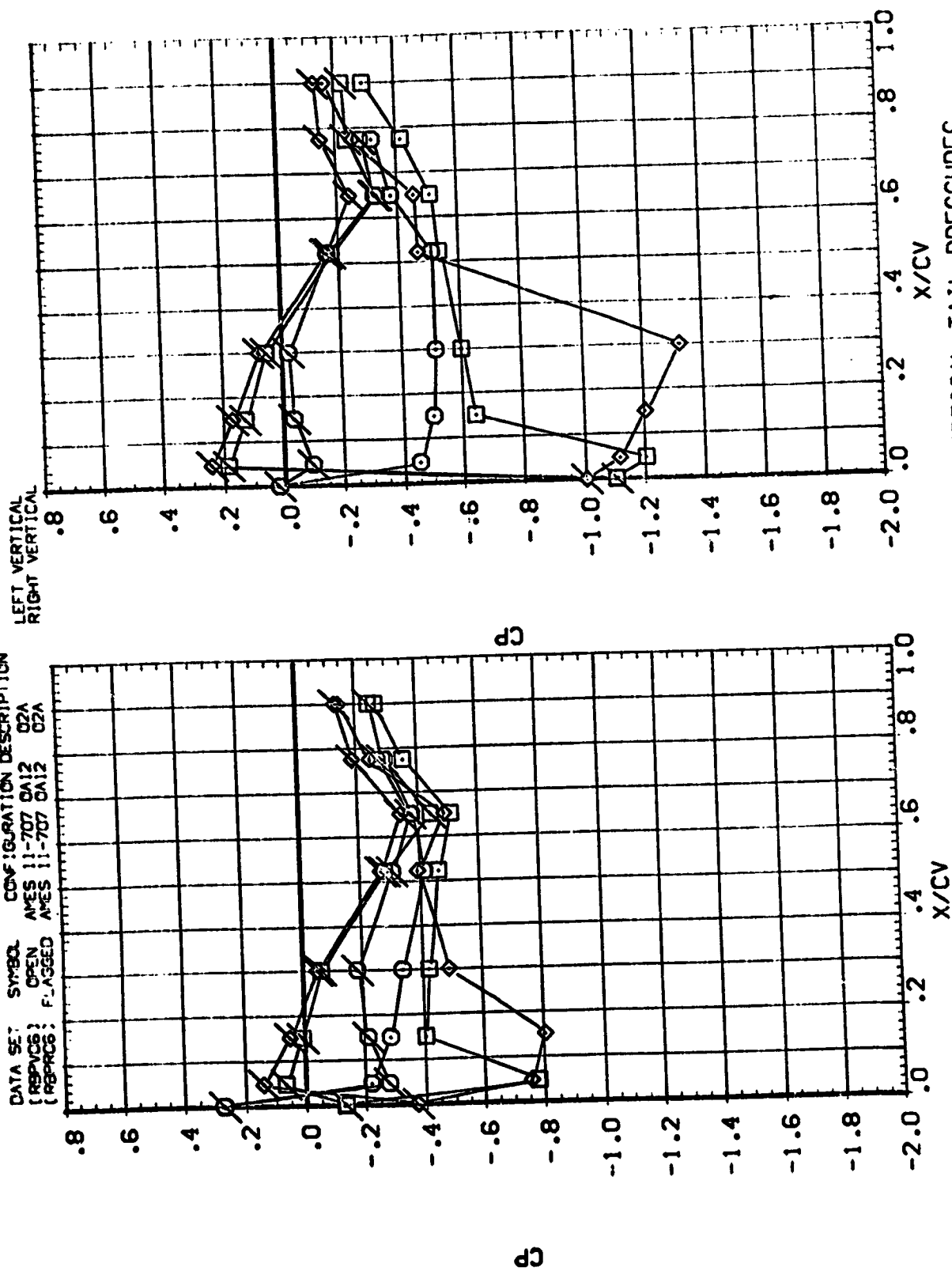


SYMBOL Z/BV
.158
.316
.600

BETA MACH
5.210 .596
10.360

PARAMETRIC VALUES
ALPHA 20.000 RUDER .000
ELEVON .000 RUFLR .000

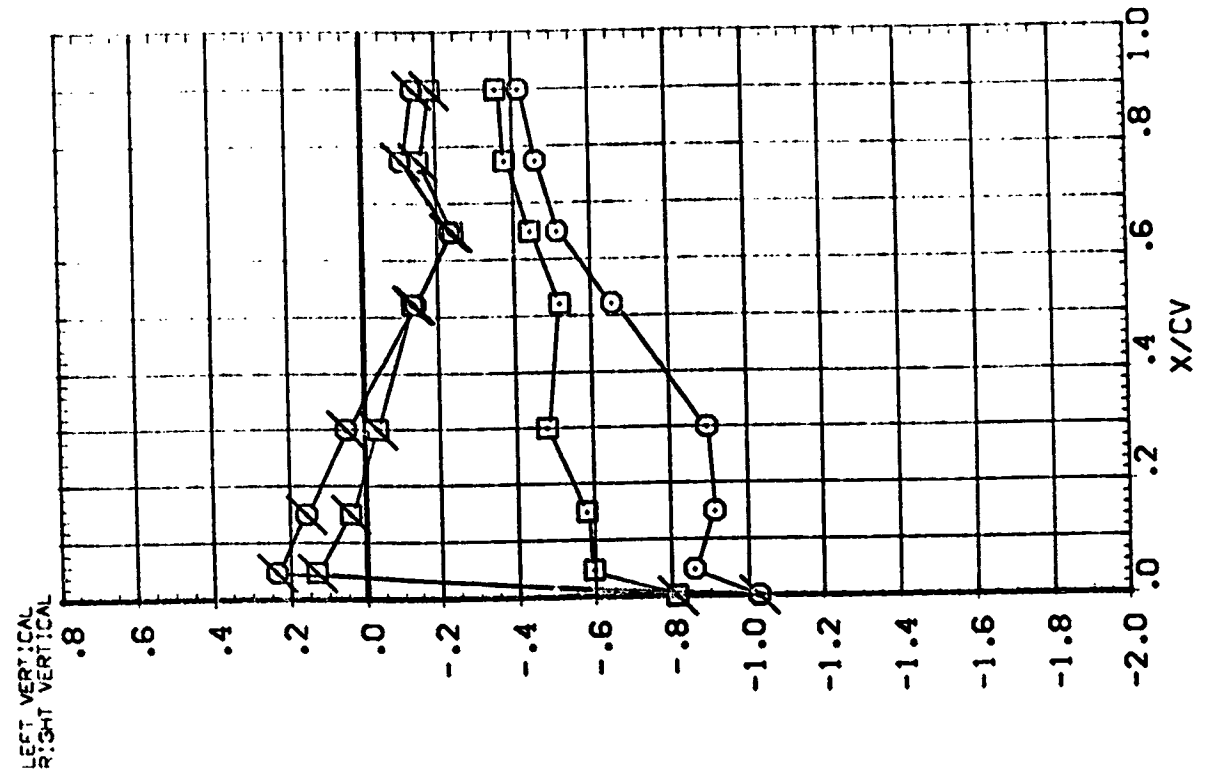
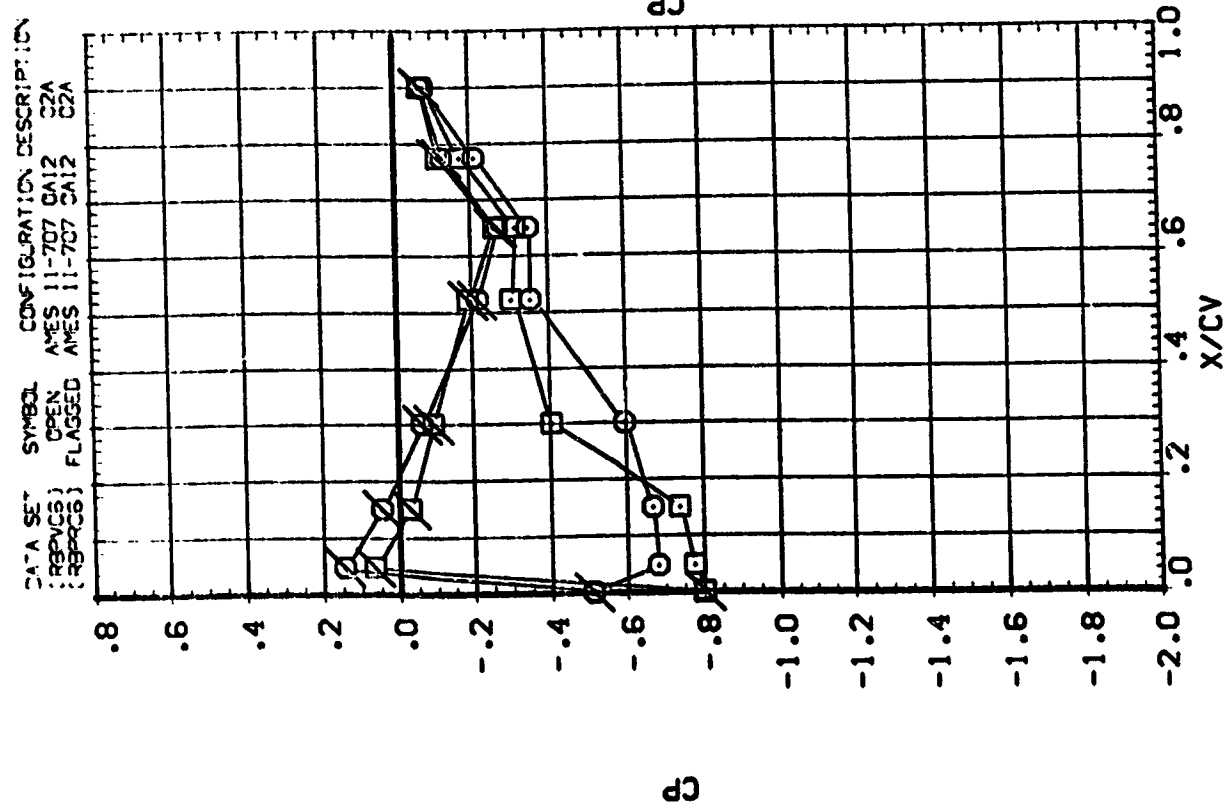
DATA SET SYMBOL CONFIGURATION DESCRIPTION
[RSPVCS] OPEN AVES 11-707 CA12 02A
[RSPVCS] FLAGGED AVES 11-707 CA12 02A





SYMBOL Z/B₁ BETA MACH
0.840 5.210 .596
0.925 13.360

PARAMETER VALUES
ALPHA 20.000 2.0000
ELEVON .000 2.0000





PARAMETRIC VALUES
 20.000 RUDER .000
 .000 RUFLR .000

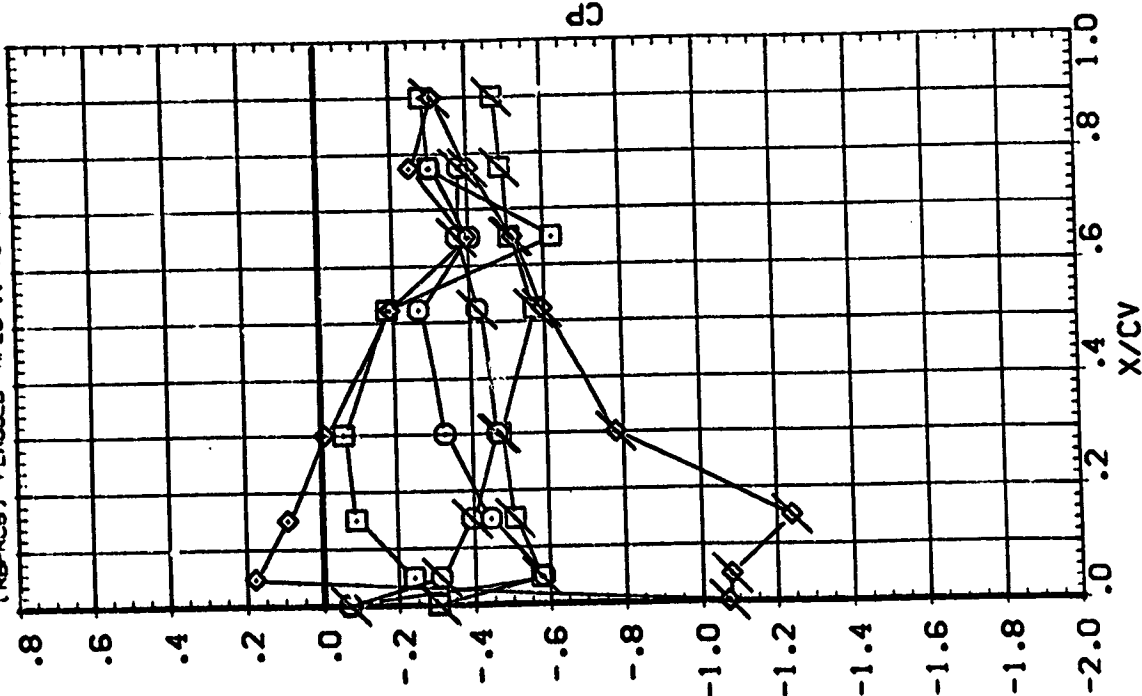
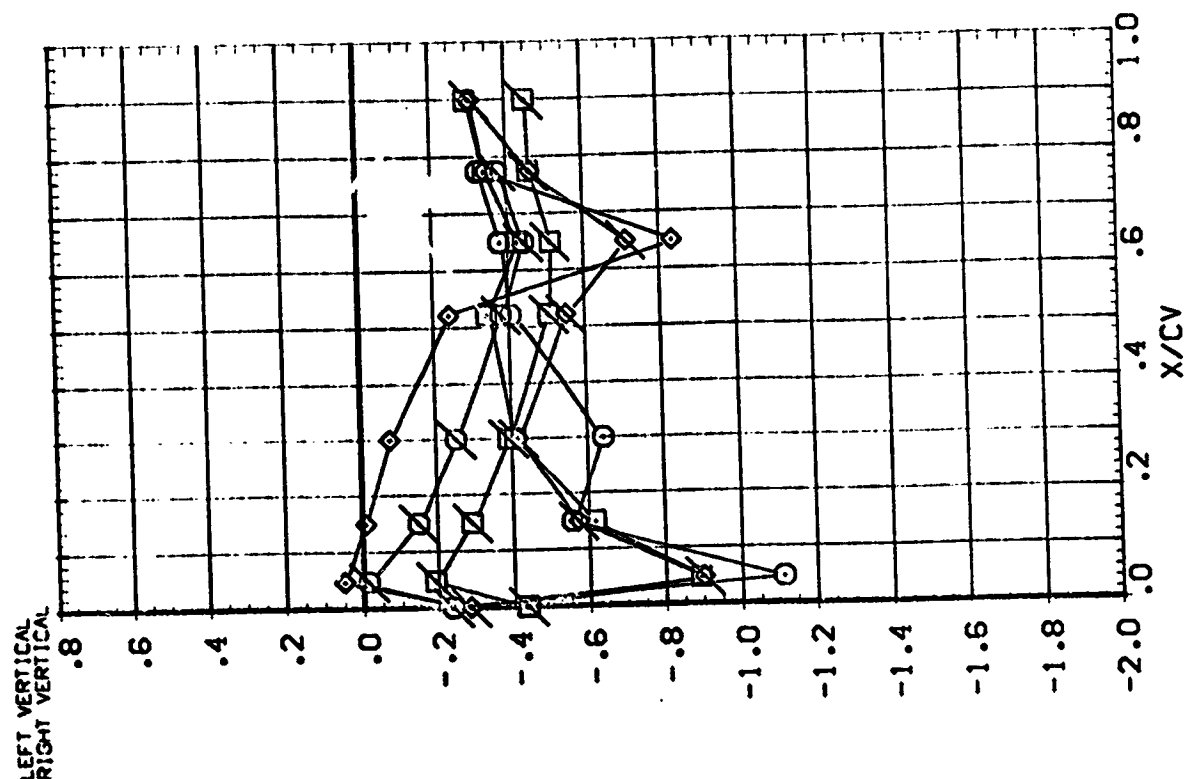
ALPHA
 ELEVON

BETA MACH
 -10.110 .902

Z/BV
 .158
 .316
 .600

SYMBOL
 OPEN
 FLAGGED

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RBPVCS) AVES 11-707 QA12 Q2A
 (RBPVCS) FLAGGED AVES 11-707 QA12 Q2A

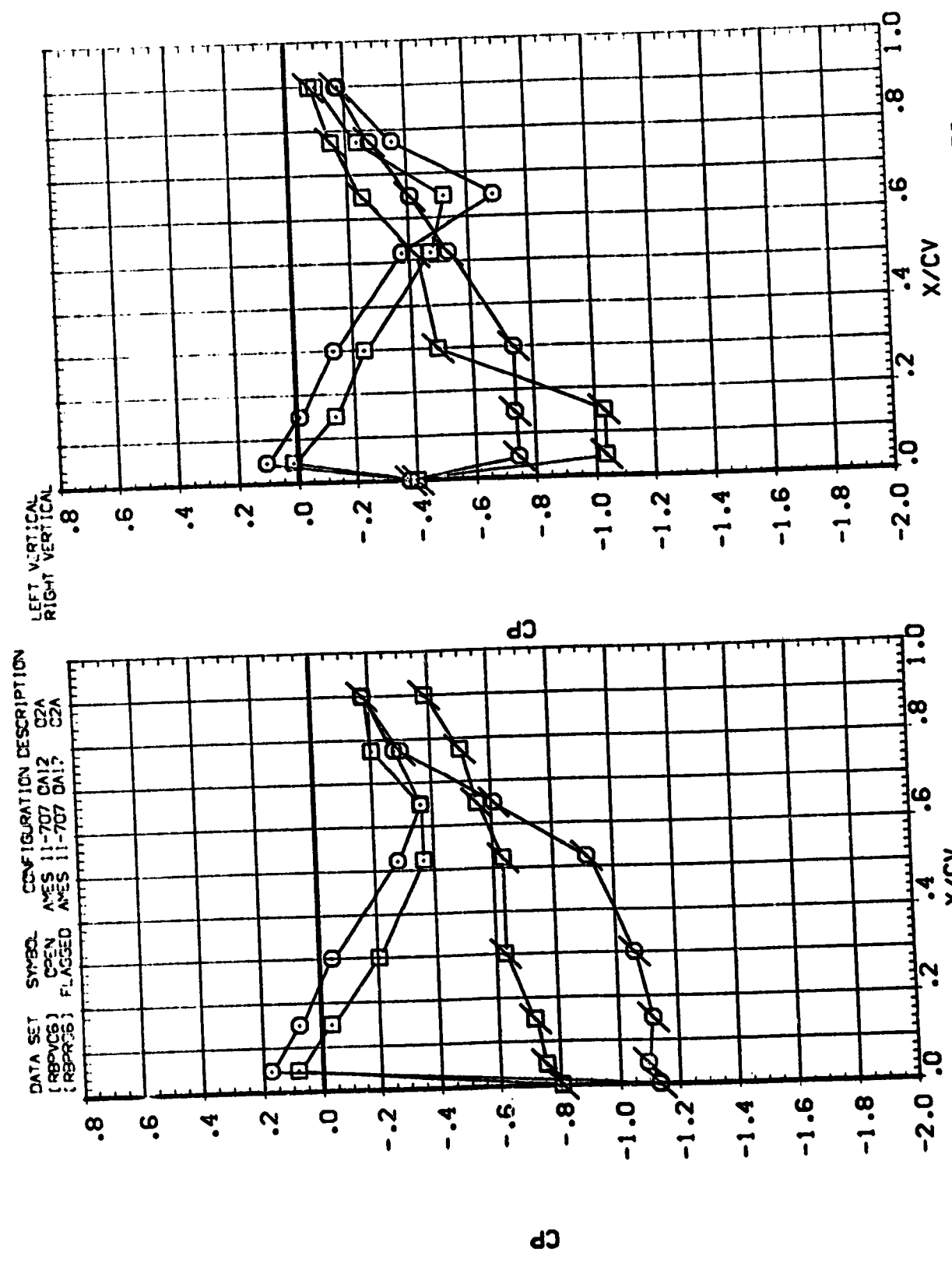


CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 20.000 R-ORDER .000
 .000 R-ORDER .000

ALPHA
 ELEVON

SYMBOL Z/BV BETA MACH
 .840 -10.110 .902
 .975 -5.020



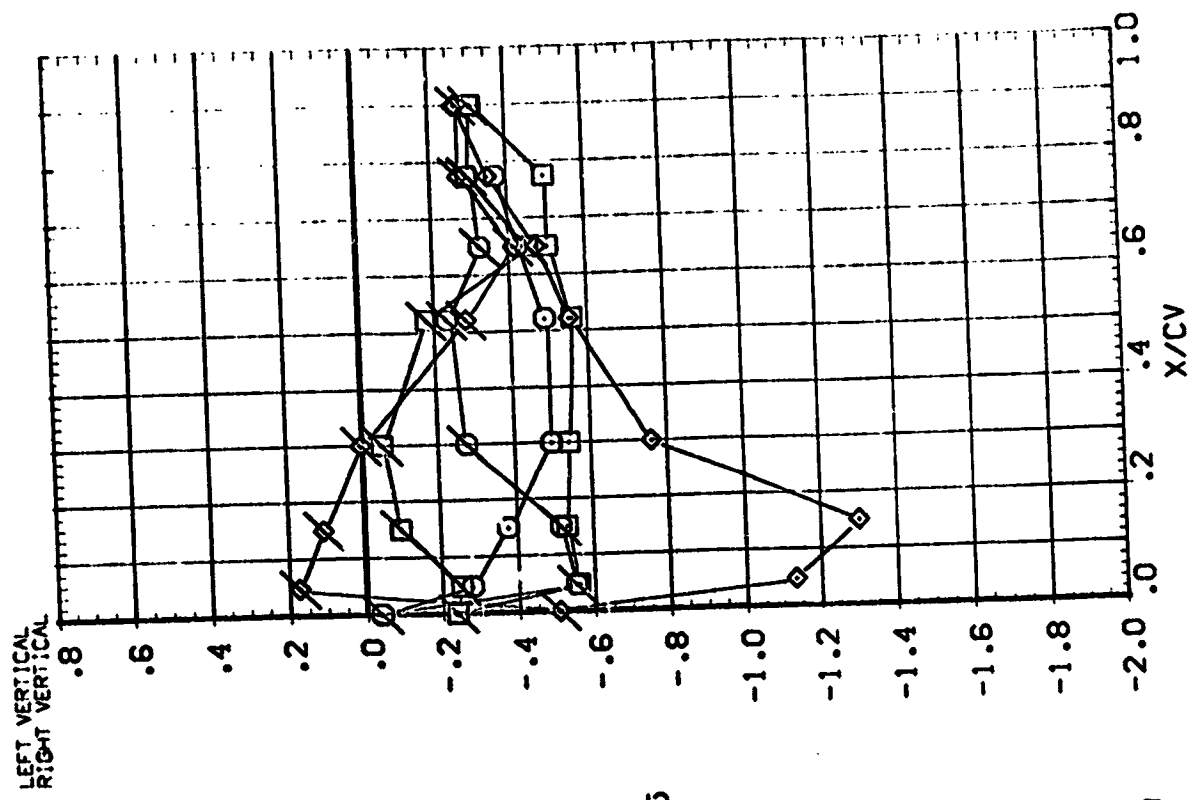
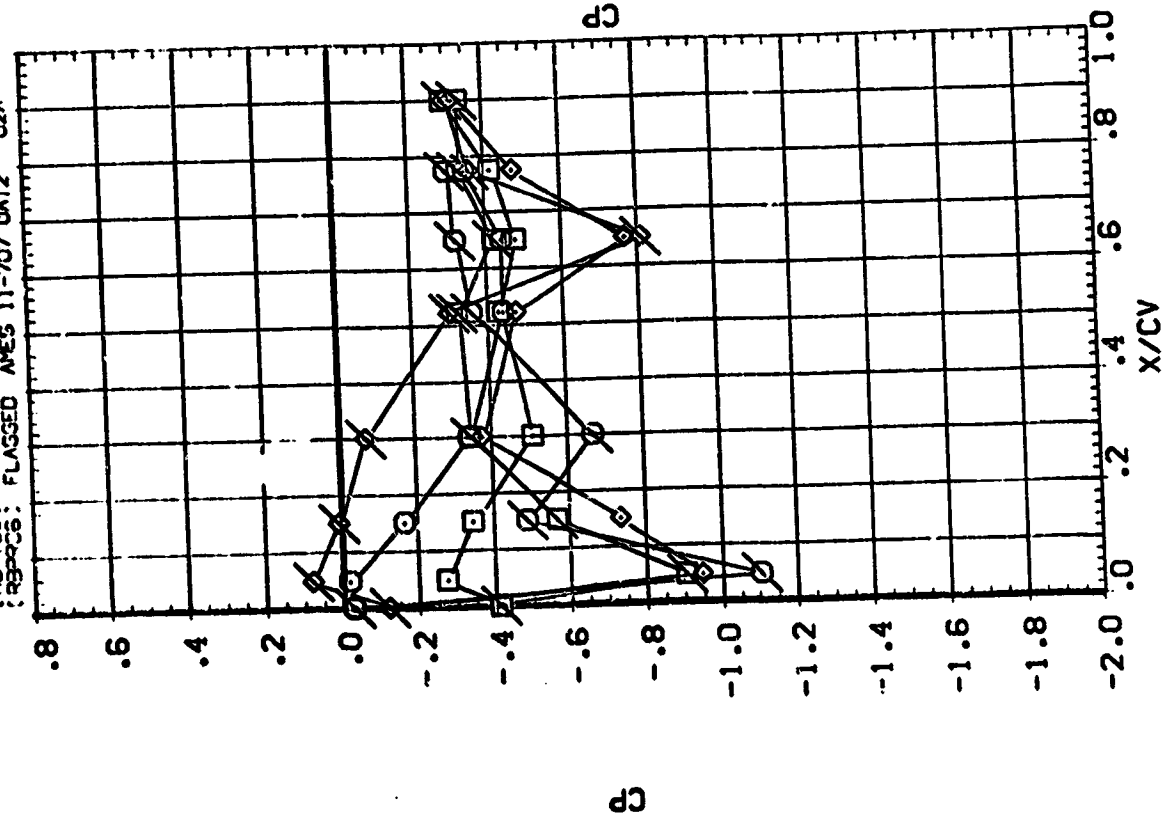
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES



SYMBOL Z/BV BETA MACH
 .158 5.260 .902
 .316 10.430
 .600

PARAMETRIC VALUES
 ALPHA .000
 ELEVON .000
 RUDDER .000
 RUDDER .000

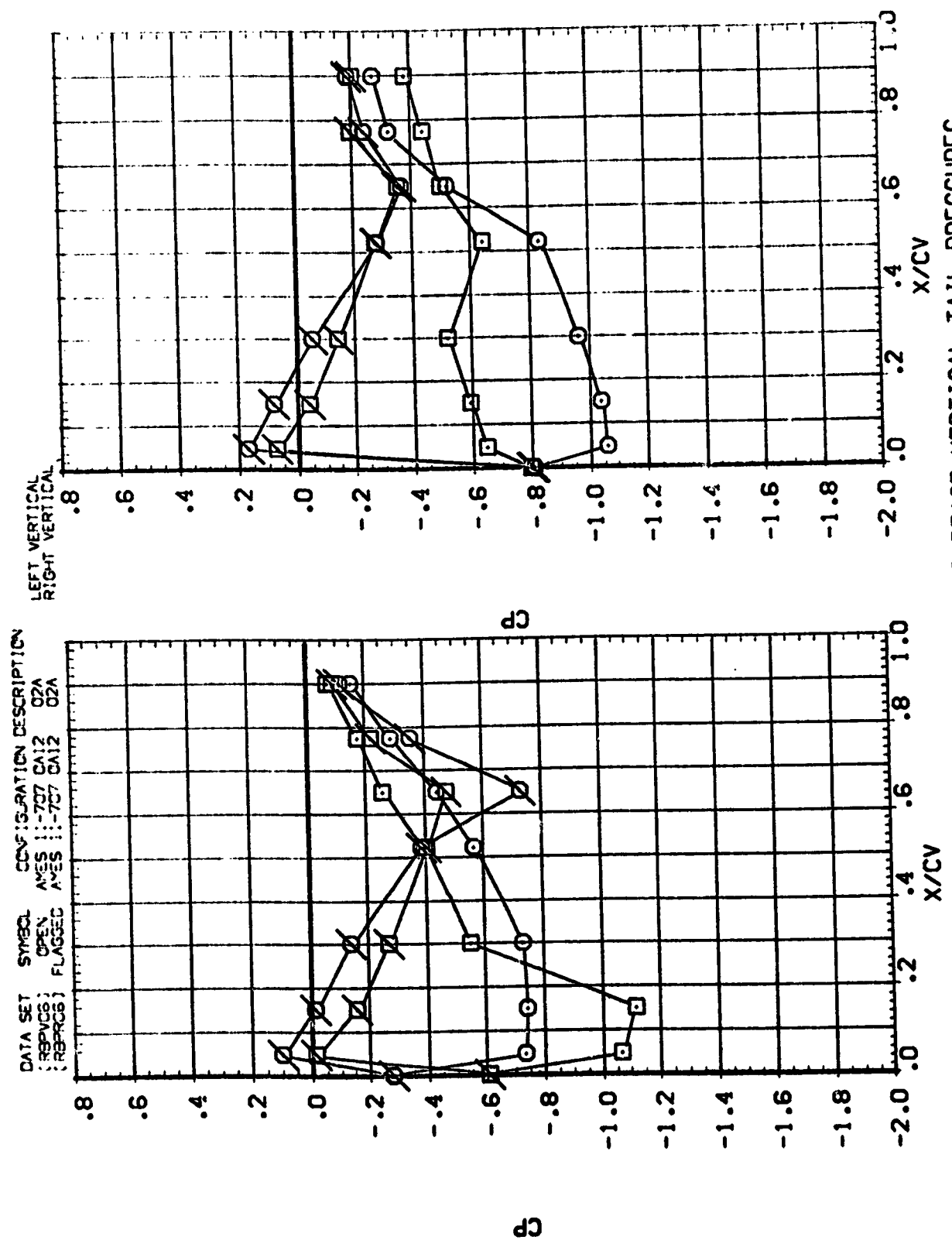
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 : RBP/CS : OPEN AMES 11-707 OA12 C2A
 : RBP/CS : FLAGGED AMES 11-707 OA12 C2A





SYMBOL Z/BV BETA MACH
.84C .902
.925 10.430

PARAMETRIC VALUES
ALPHA 20.000 RUDDER .000
ELEVON .000 RUDFLR .000





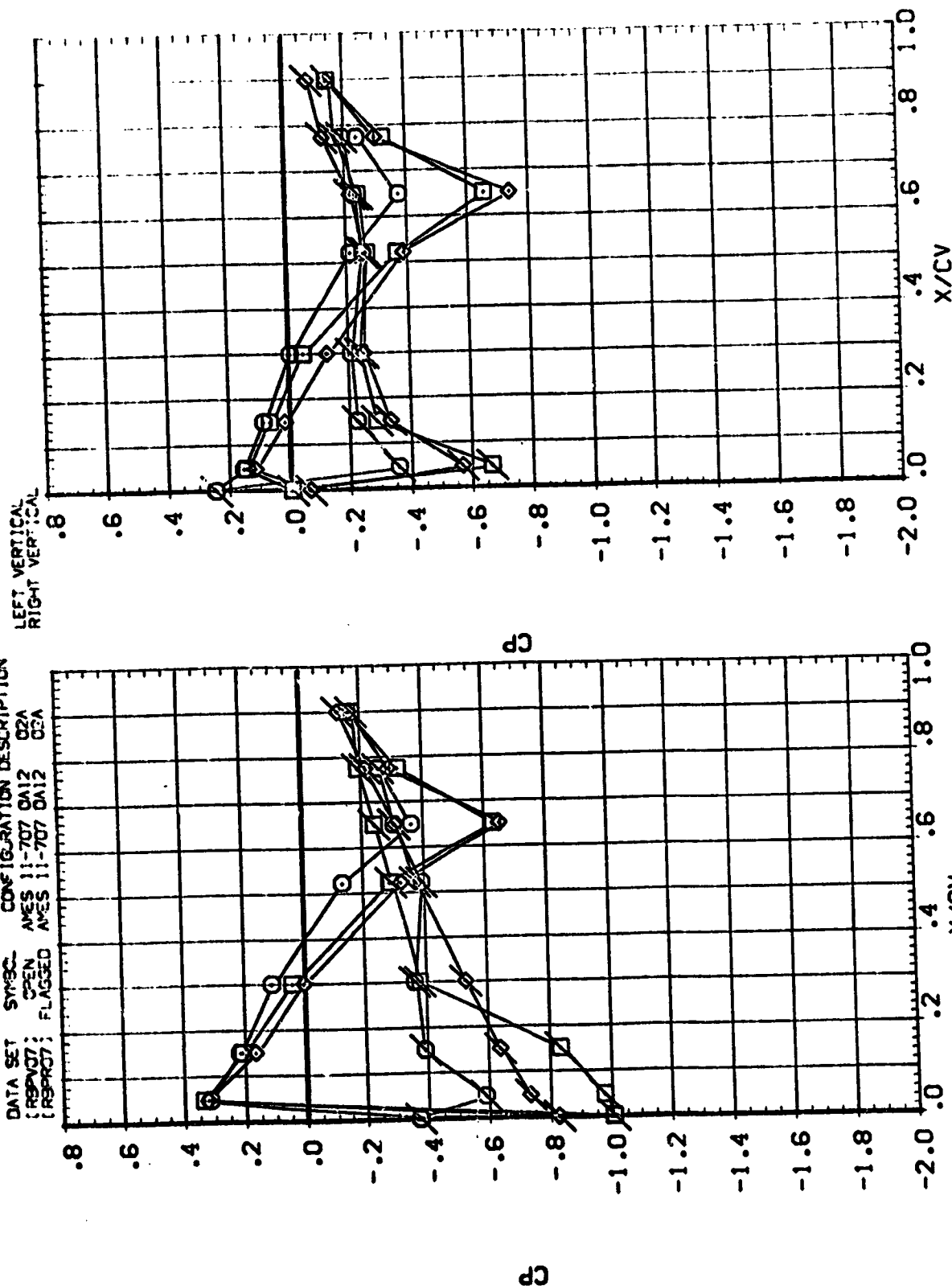
SYMBOL Z/BV
 .158
 .316
 .600

BETA
 .980
 .940

MACH
 .600

PARAMETRIC VALUES
 ALPHA .000
 ELEVON .000
 RUDDER .000
 RUDDER .000

DATA SET SYMBO- CONFIGURATION DESCRIPTION
 (RSPV07) OPEN AYES 11-707 OA12 OA2A
 (RSPV07) FLASSED AYES 11-707 OA12 OA2A



PARAMETRIC VALUES

ALPHA
ELEVON

BETA
-7.980
-3.940

Z/BV
.840
.925

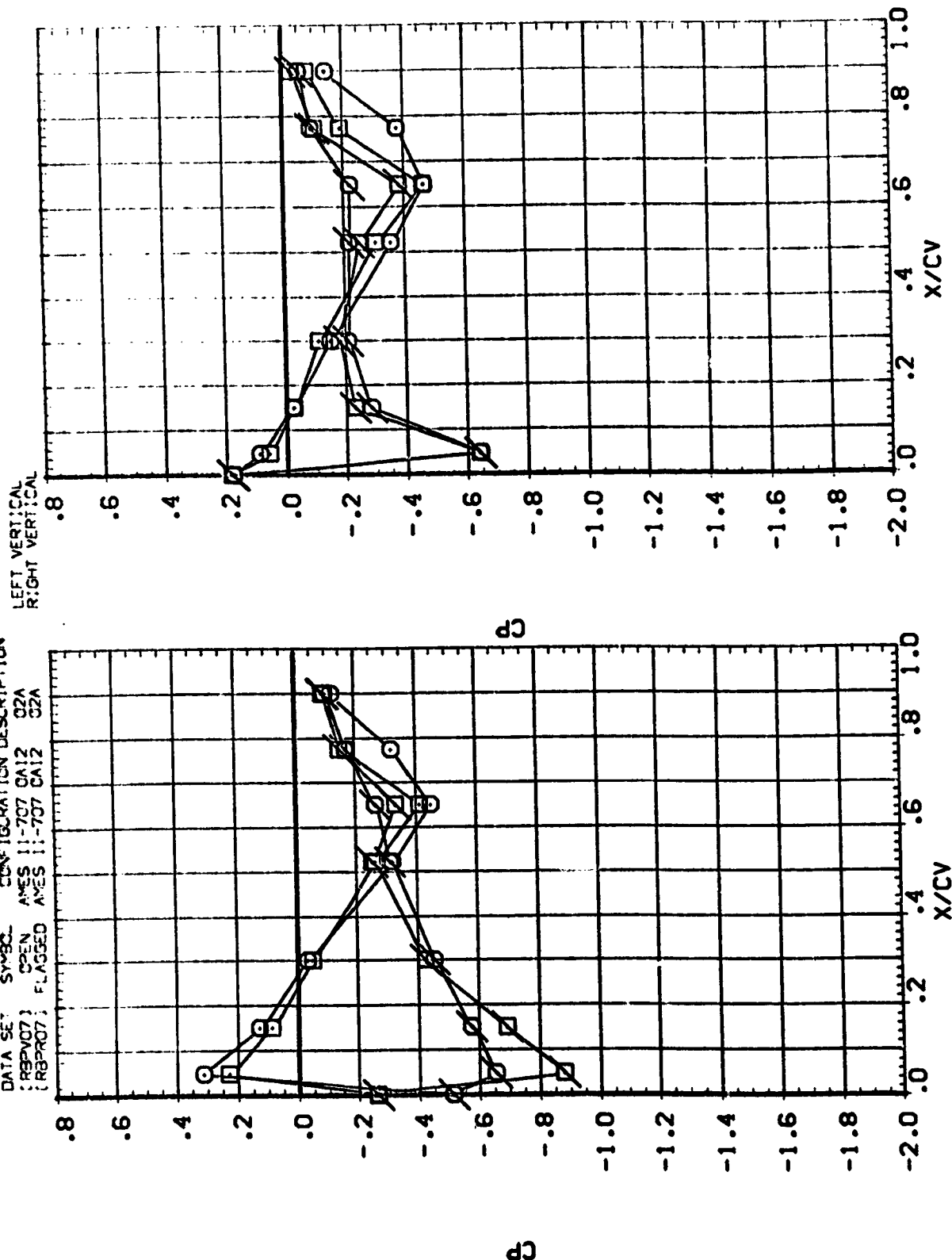
SYMBOL
O
□

MACH
.600

-10.000
.000
RUEEP
RUEEP
.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION

RBPM07 OPEN AXES 11-707 DA12 02A
RBPM07 FLAGGED AXES 11-707 DA12 02A

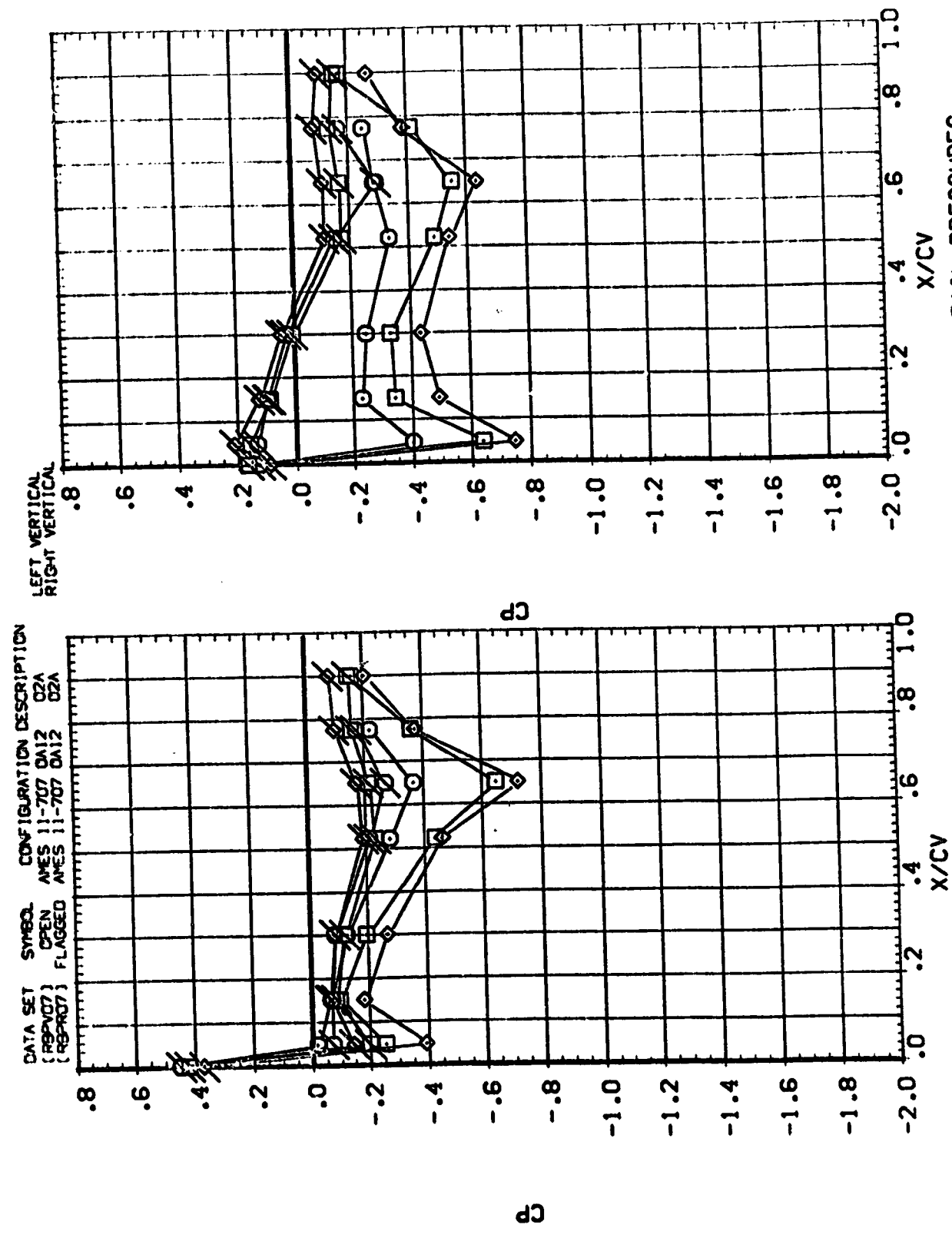




SYMBOL
○ □ ◇

Z/BV .58 .316 .600
BETA .090 4.210
MACH .600

PARAMETRIC VALUES
ALPHA .000 .000 .000
ELEVEN .000 .000 .000
-10.000 .000 .000

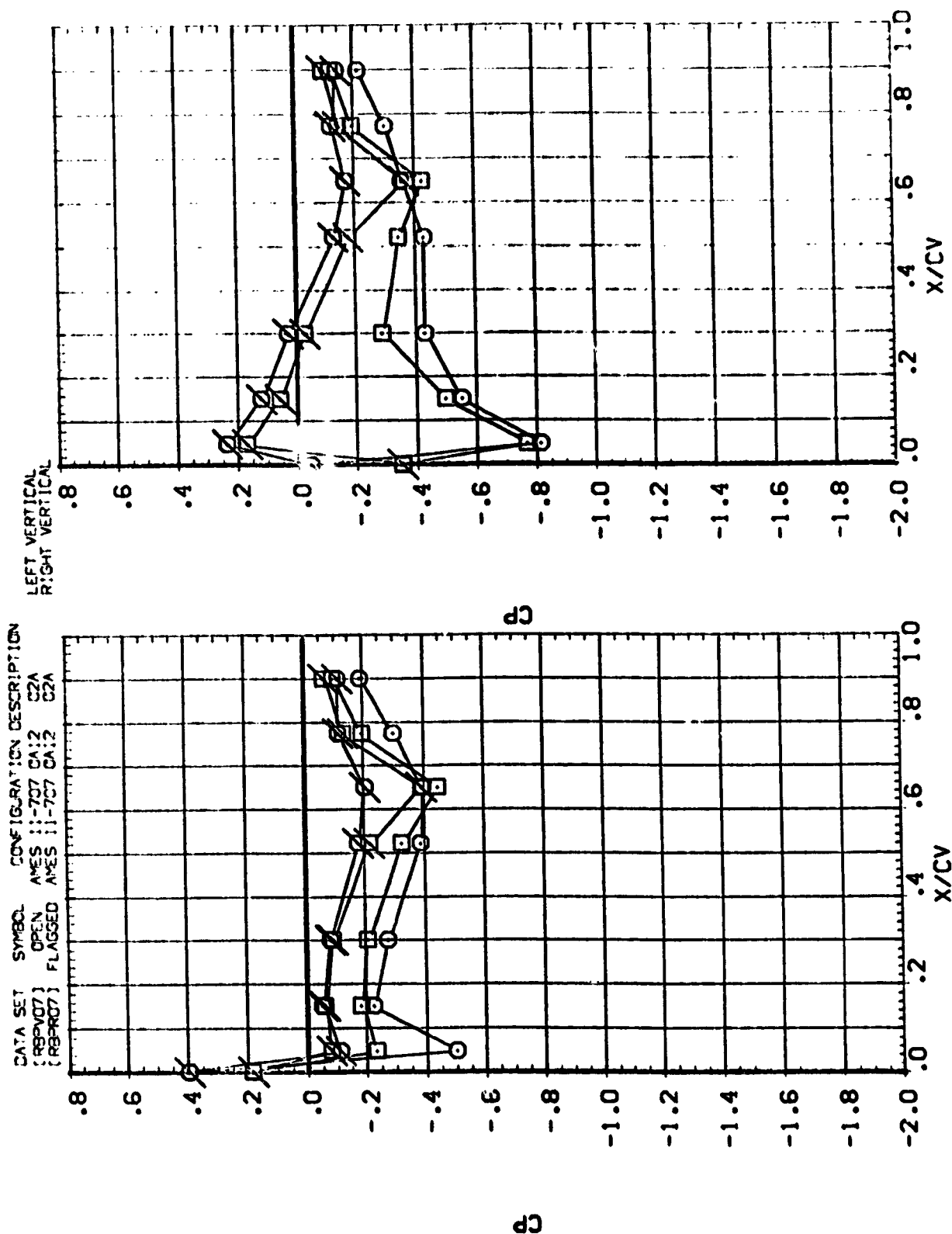


PARAMETRIC VALUES

ALPHA	0.000	0.000	0.000
BETA	0.000	0.000	0.000
ELEV	0.000	0.000	0.000

SW32 Z/BV BETA MACH

SW32	Z/BV	BETA	MACH
0.01	.840	.090	.600
	.925	4.210	



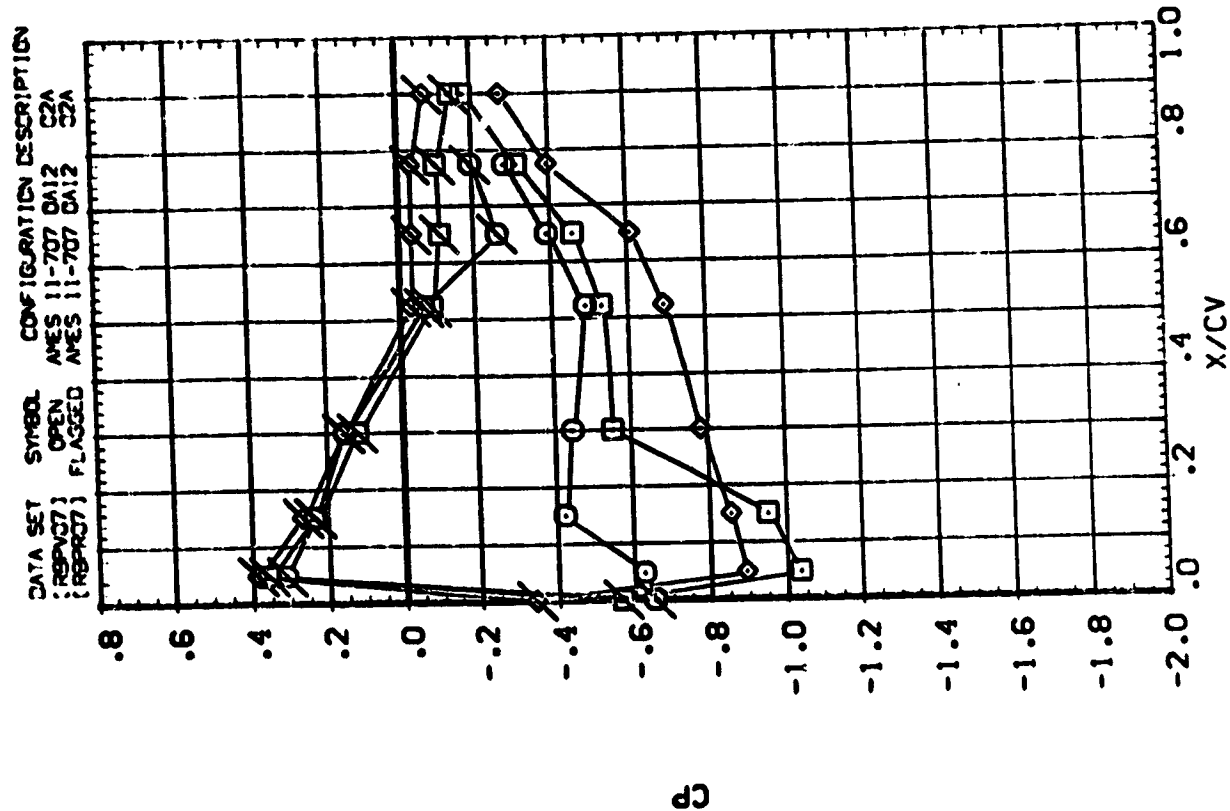
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES



SYMBOL Z/B₁ BETA MACH
 11-707 0.158 8.320 .600
 11-707 0.316
 11-707 0.600

PARAMETRIC VALUES
 ALPHA .000 RUMBER -10.000
 ELEVON .000 QUAD R

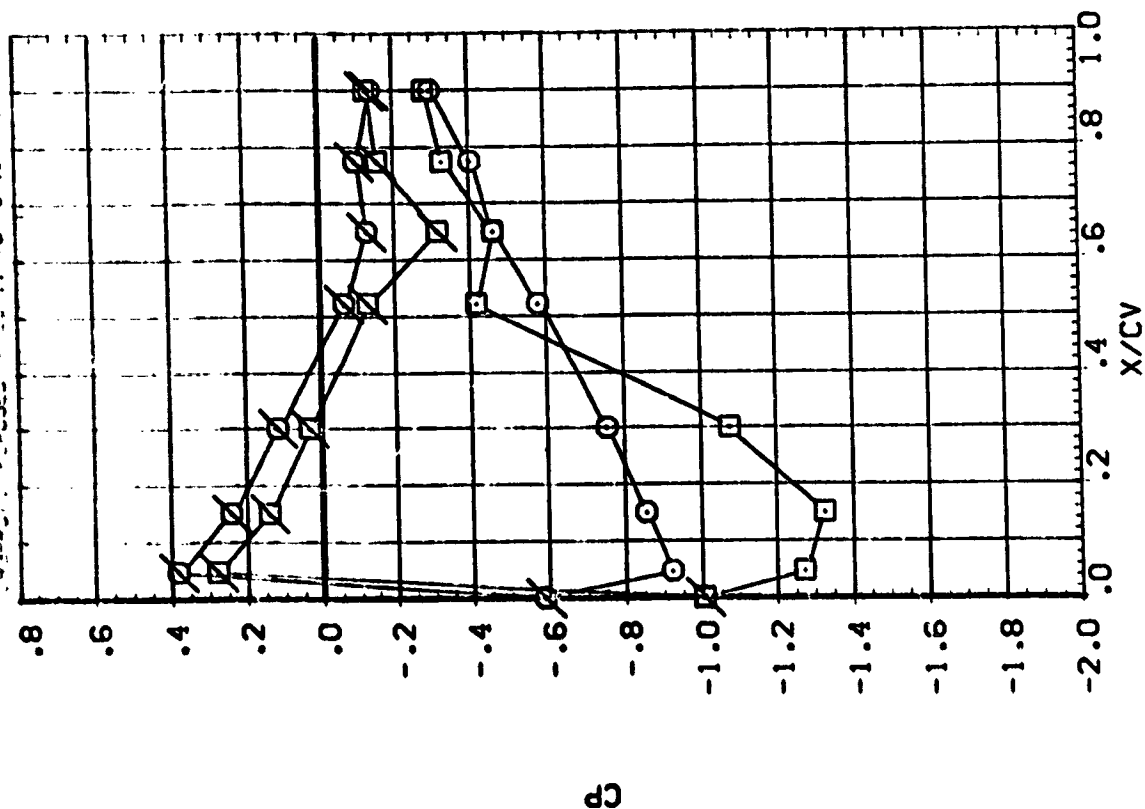
LEFT VERTICAL
 RIGHT VERTICAL



COEFFICIENT OF LIFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

A-244
11-6-65

100

[illegible]

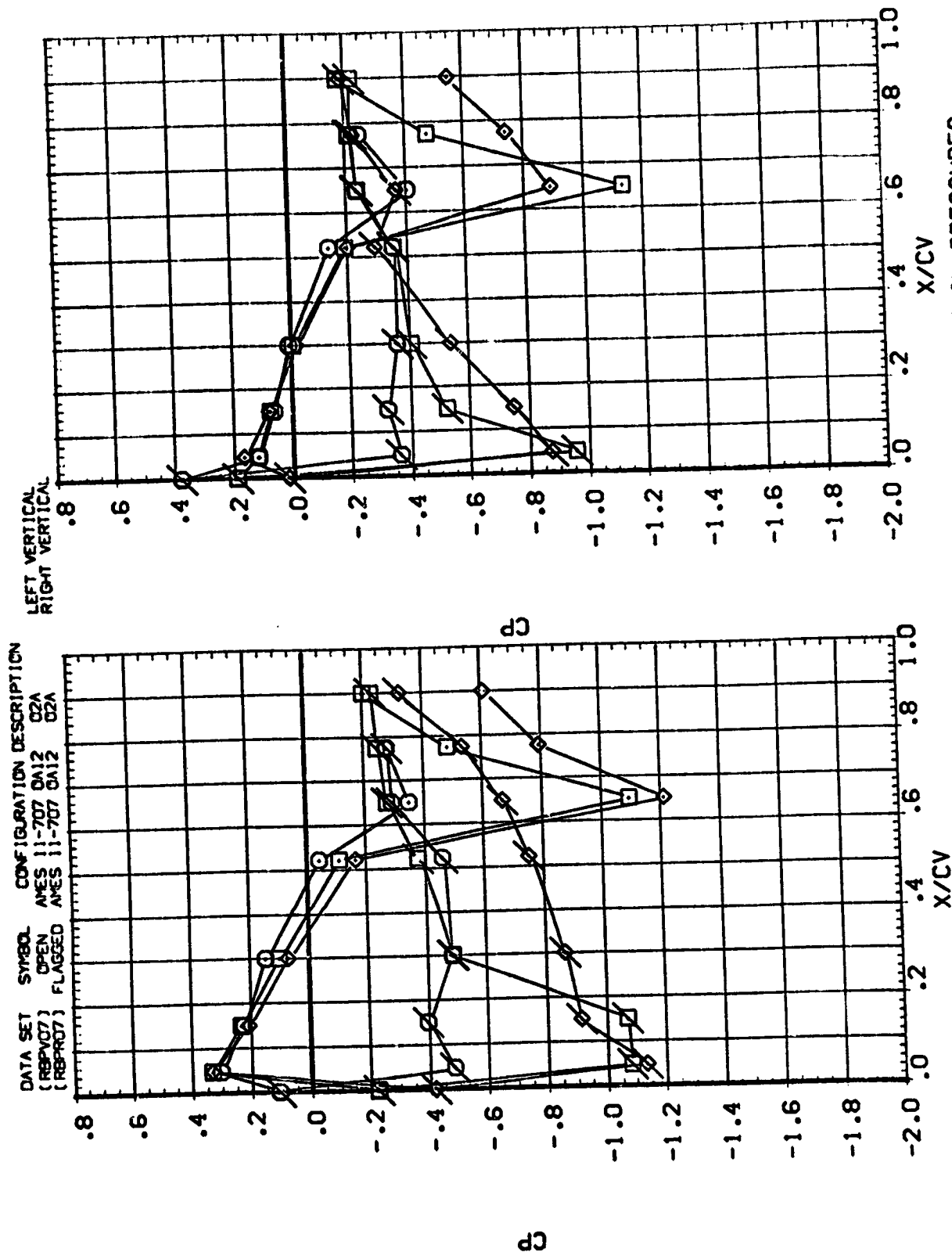
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES



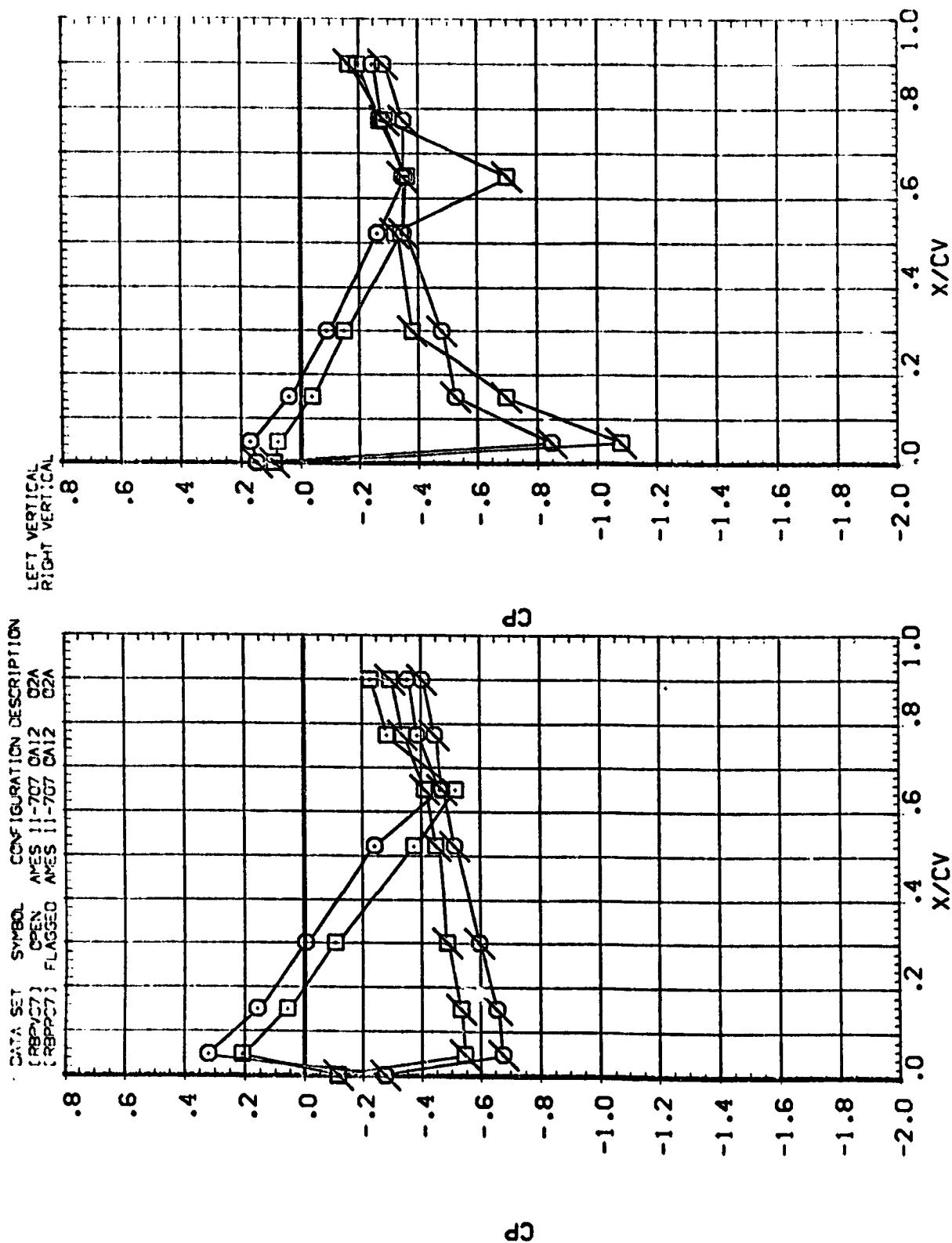
SYMBOL Z/BV
 .158
 .316
 .500

BETA MACH
 -8.09C .902
 -4.000

PARAMETRIC VALUES
 .000 RUDDER -10.000
 .000 RUJFLR .000
 ALPHA
 ELEVON



SYMBOL Z/B. BETA MACH
 .84C .907
 .925 .4.000
 PARAMETRIC VALUES
 ALPHA .000 RODER -10.000
 ELEVON .000 RODER .000



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES



SYMBOL
○ □ ◇

Z/BV .158
.316
.600

BETA .090
4.260

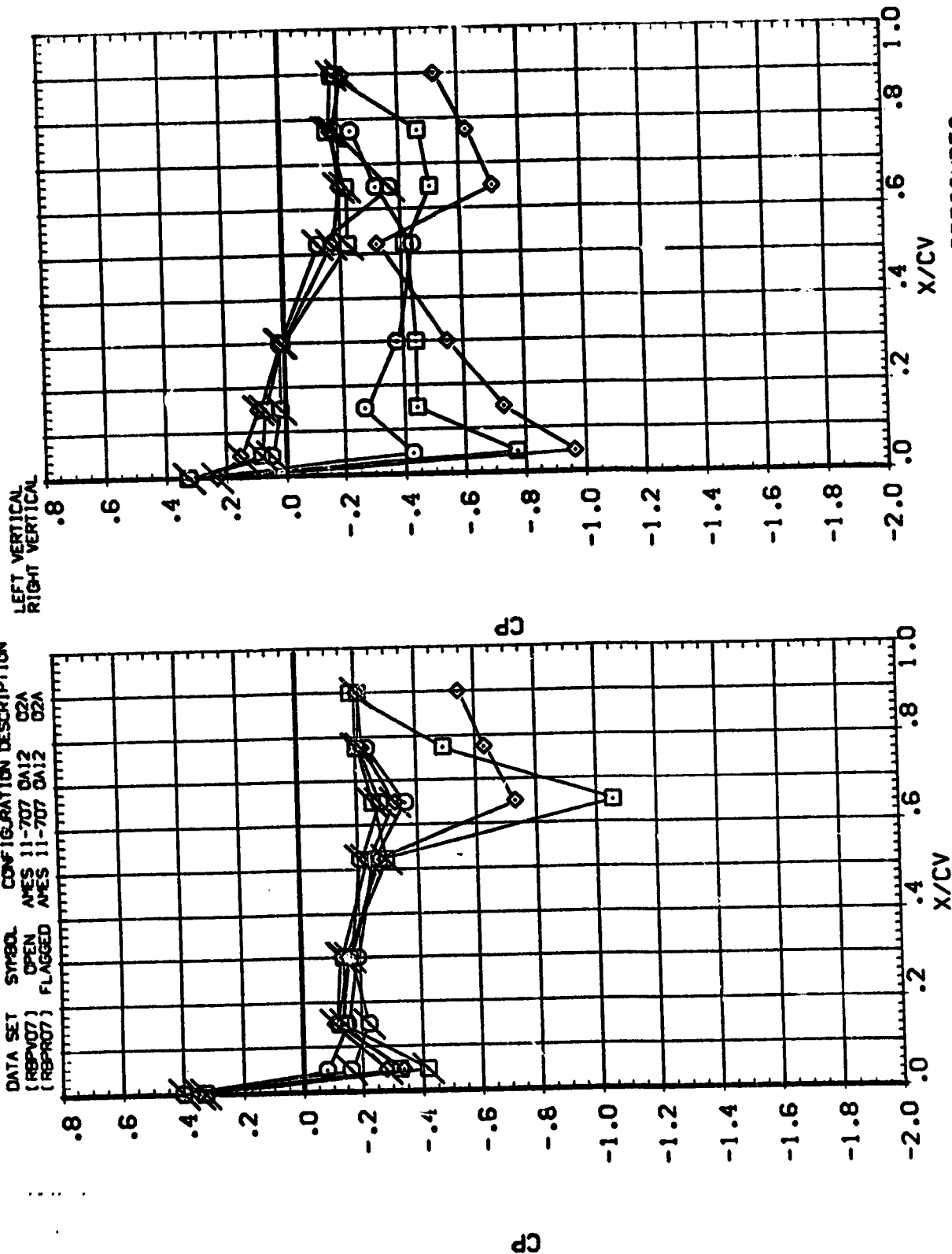
MACH .902

PARAMETRIC VALUES

ALPHA .000
ELEVON .000

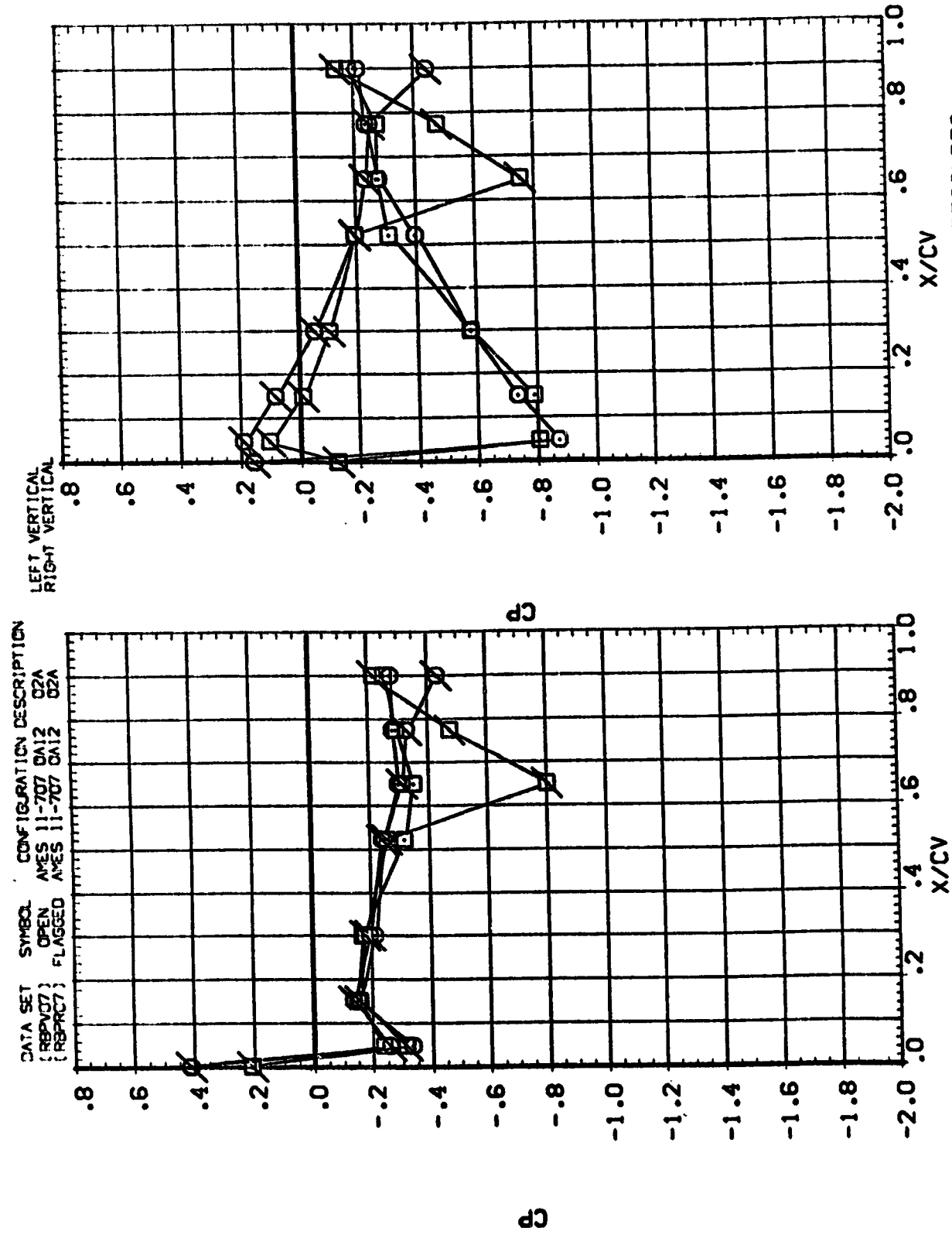
RUDDER -10.000
RUFLR .000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
(RBPV07) OPEN AYES 11-707 OA12 O2A
(RBPV07) FLAGGED AYES 11-707 OA12 O2A



PARAMETRIC VALUES
 ALPHA .000 RUDDER -10.000
 ELEVON .000 RUDELRL .000

SYMBOL Z/BV BETA MACH
 .840 .090 .902
 .925 4.260



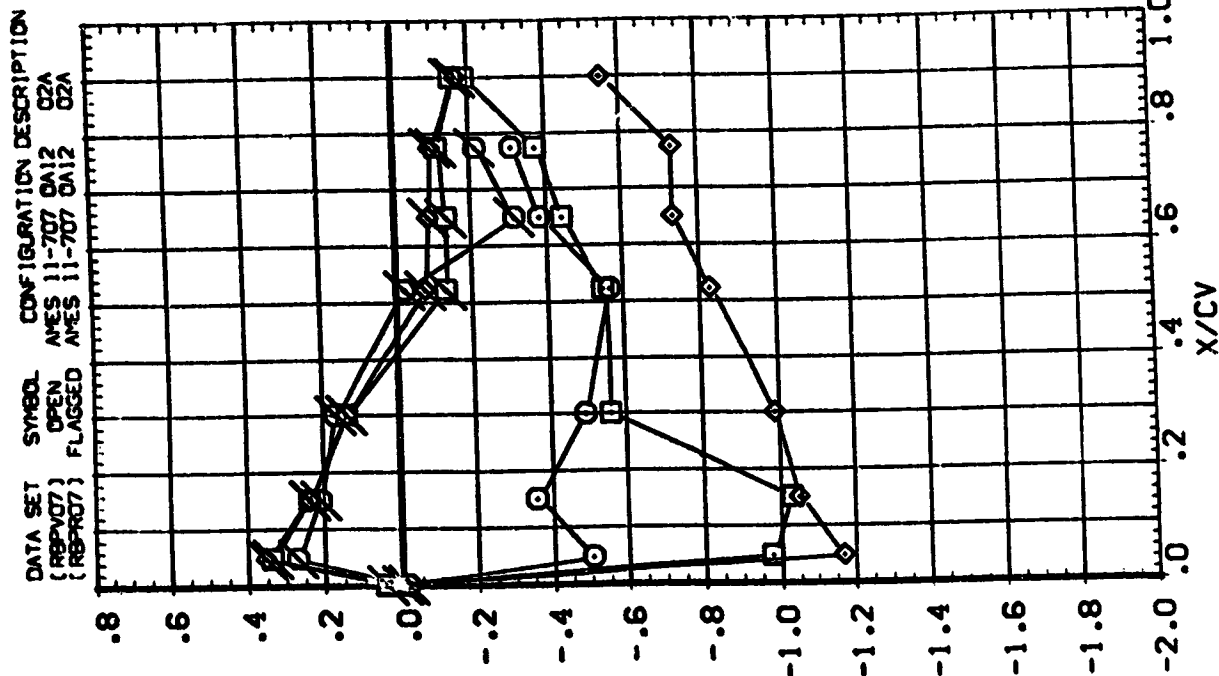
PARAMETRIC VALUES
 .000 RUDER
 .000 RUJFLR
 -10.000

ALPHA
 ELEVON

BETA 8.440 MACH .902

Z/BN
 .158
 .316
 .600

LEFT VERTICAL
 RIGHT VERTICAL



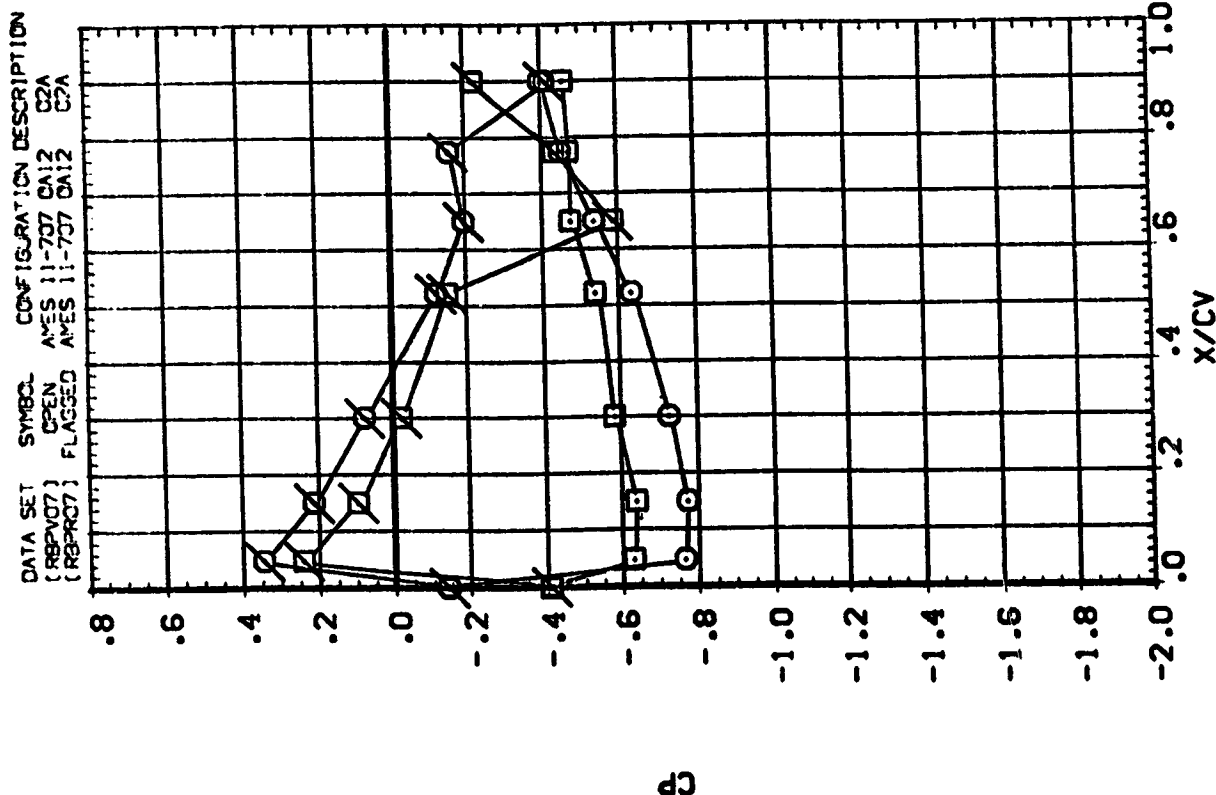
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 .000 RUDDER -10.000
 .000 RUDDER .000

ALPHA
 ELEVON

SYMBOL Z/BV BETA MACH
 .840 8.440 .902
 .925

LEFT VERTICAL
 RIGHT VERTICAL



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES



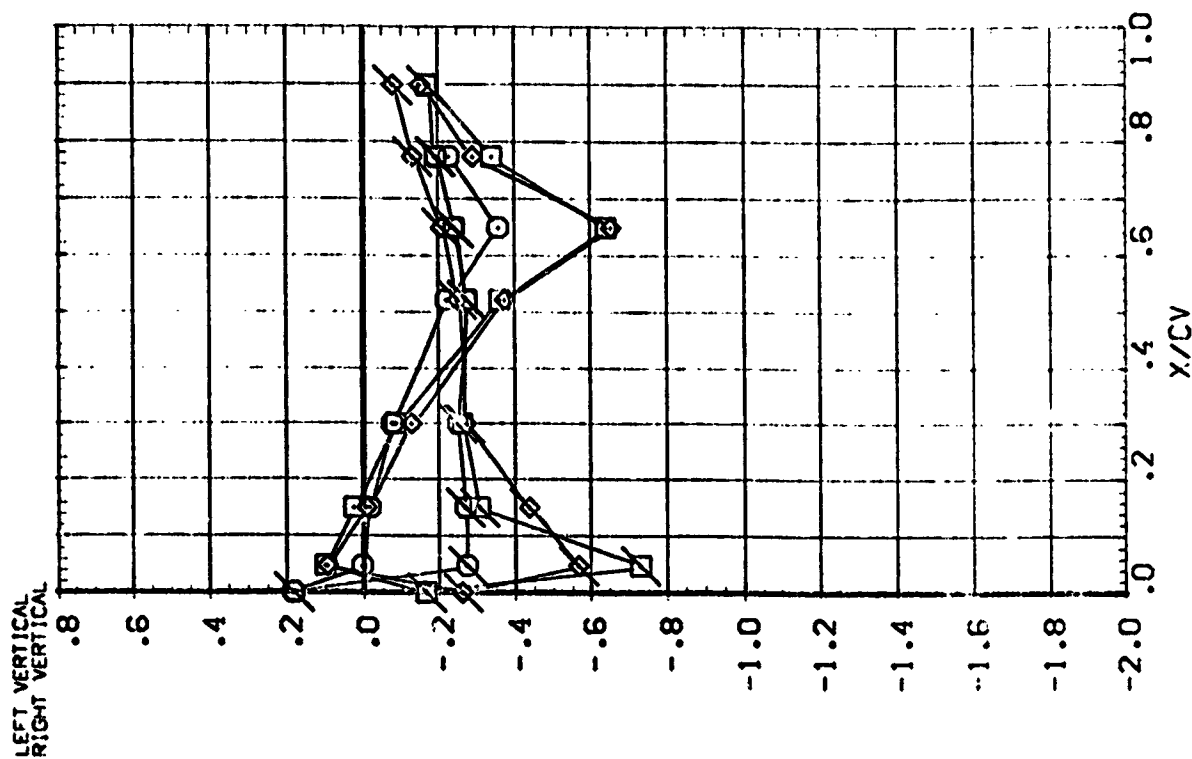
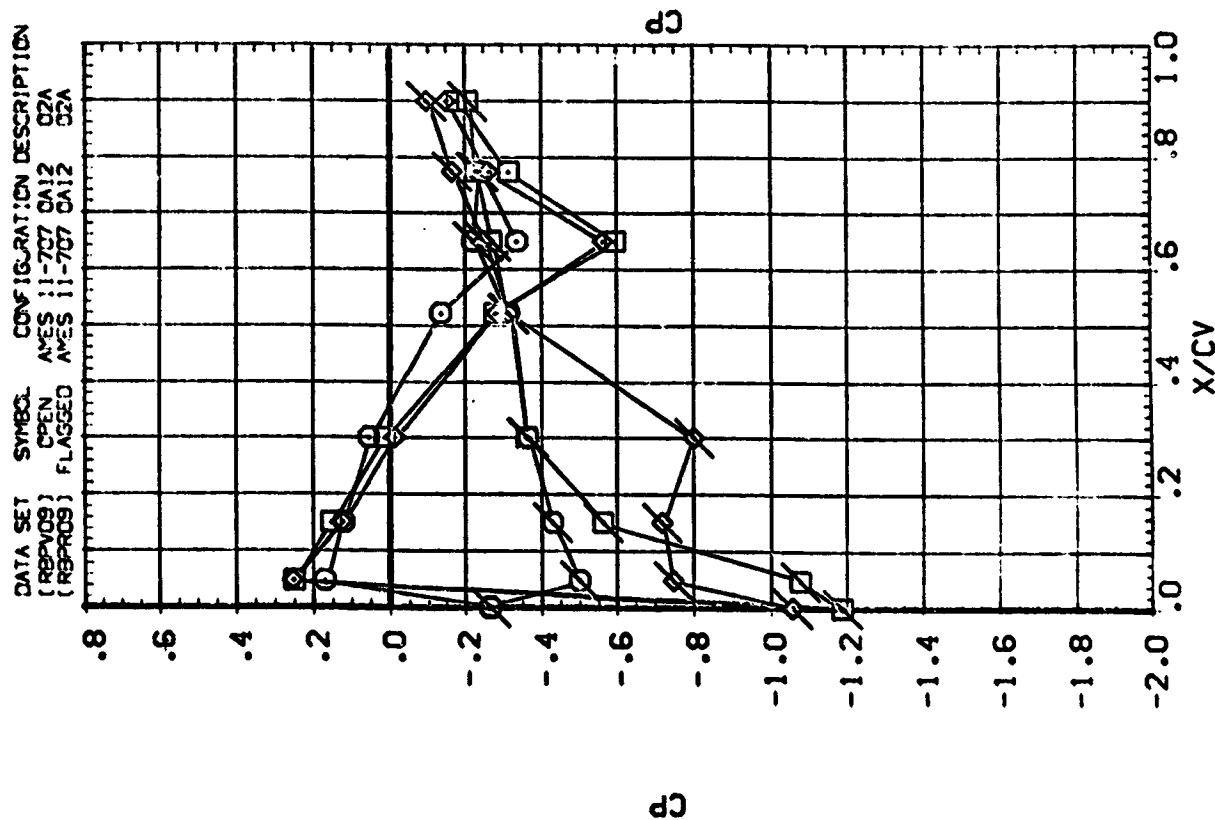
SYMBOL Z/BV
○ .158
□ .316
◇ .600

BETA
-8.060
-3.980

MACH
.599

PARAMETRIC VALUES
ALPHA
ELEVON
15.000
.000
RUDER
RUDFLR
-10.000
.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
(RBPV09) OPEN AVES 11-707 DA12 02A
(RBPV09) FLAGGED AVES 11-707 DA12 02A



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES

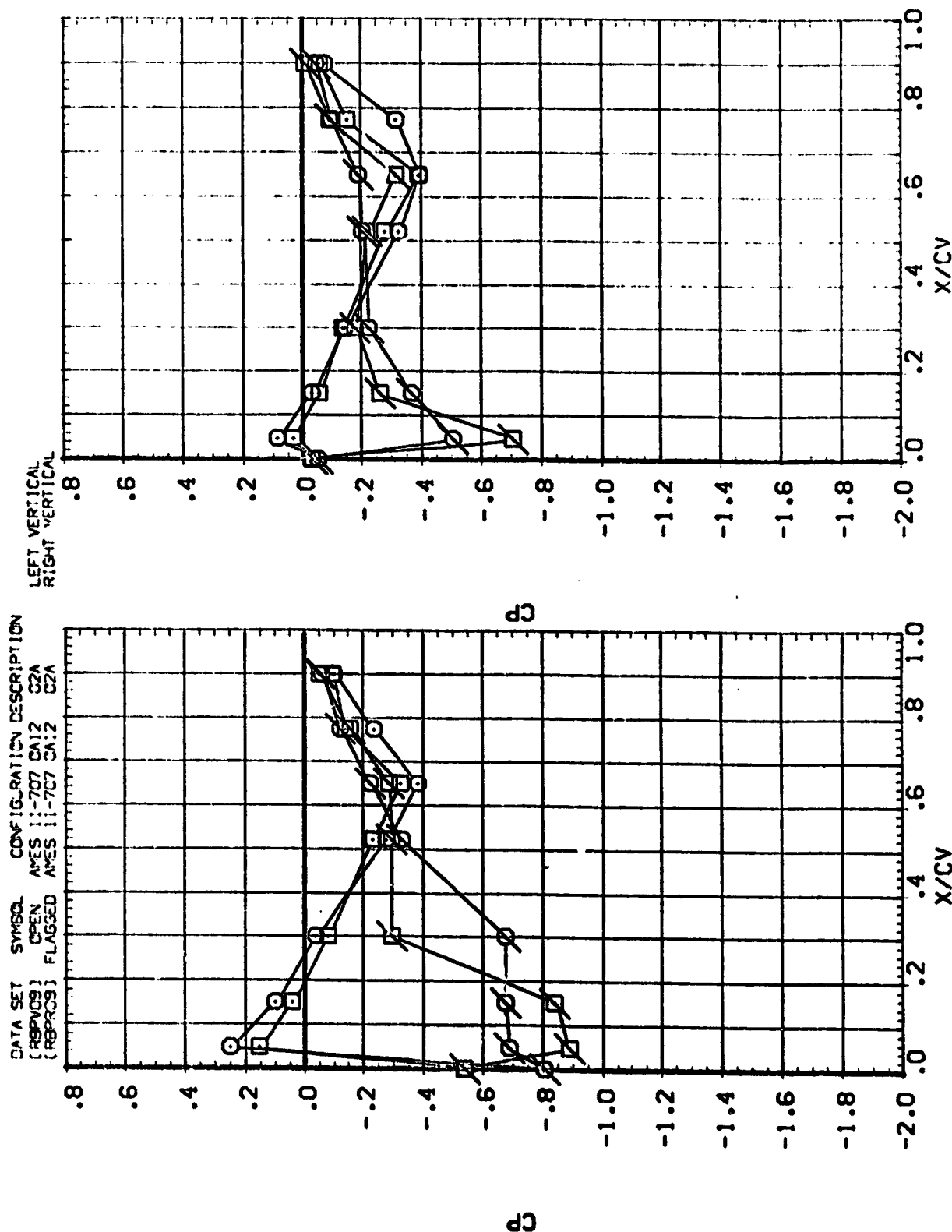
ALPHA	10.000	RUDDER	-10.000
ELEV	1.000	RUDDER	1.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RBPV09)	CPEN	AMES 11-707 CA12	C2A
(RBPV09)	FLAGGED	AMES 11-707 CA12	C2A

SYMBOL Z/BV BETA MACH

.84C	-8.060	.589
.925	-3.980	



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES



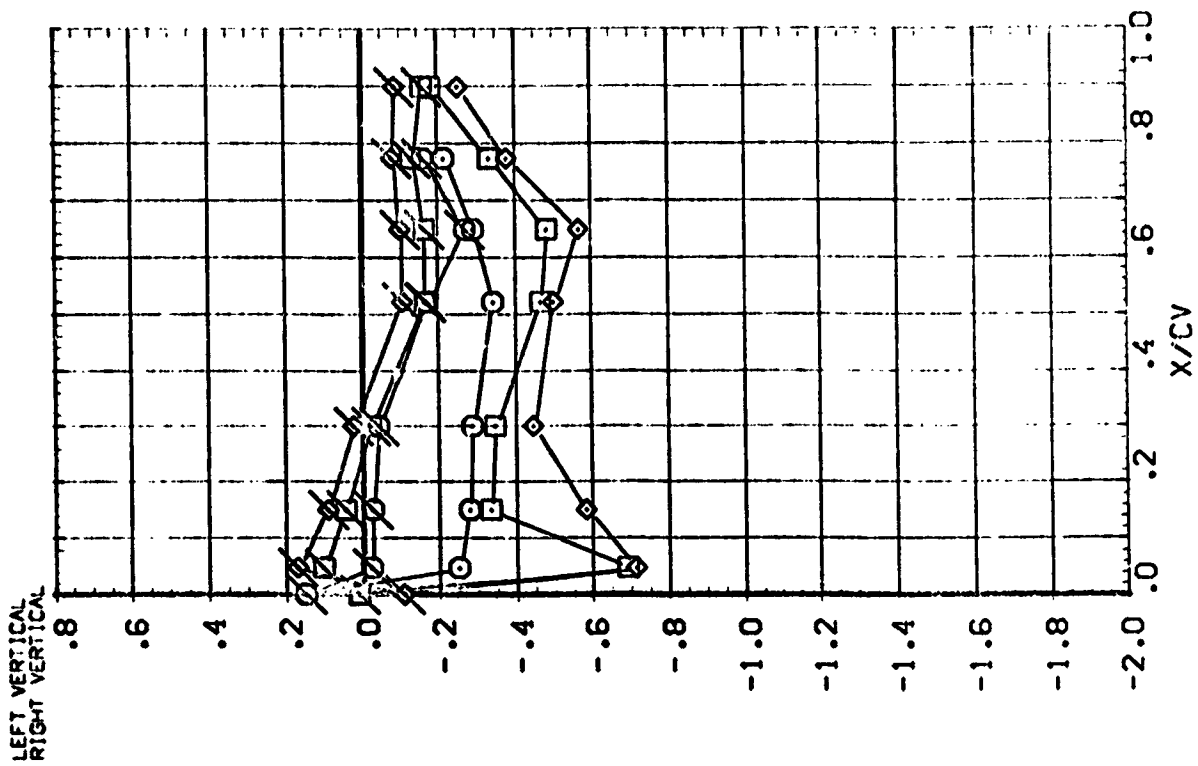
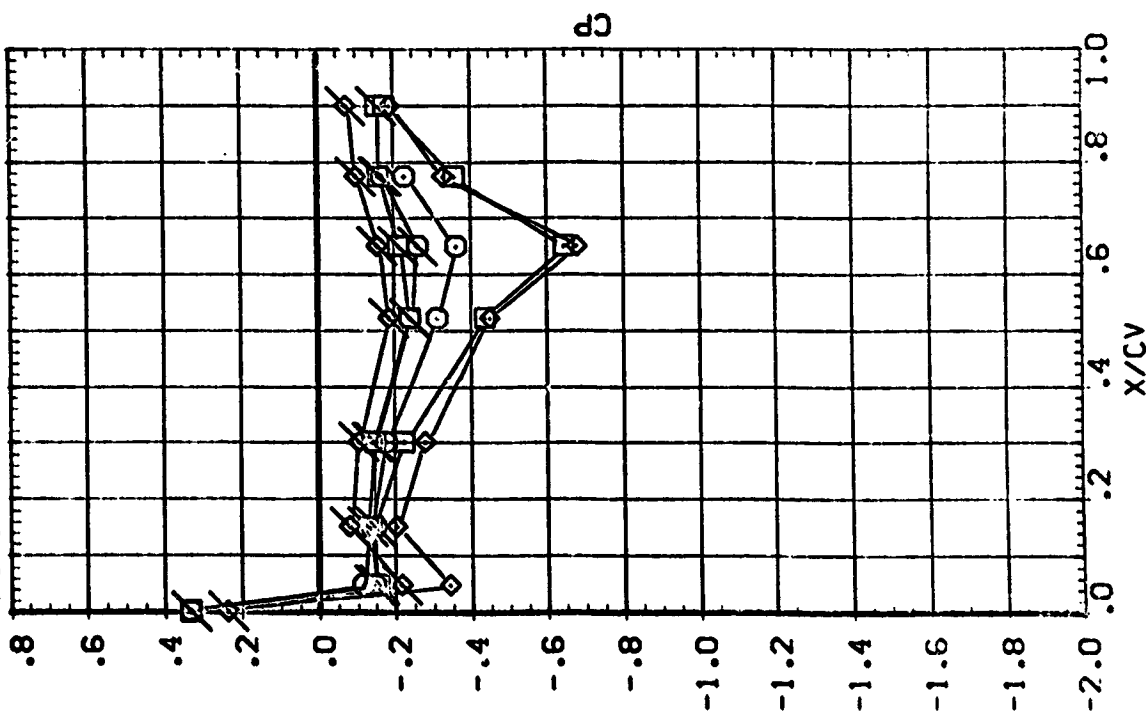
SYMBOL Z/BV
 .158
 .316
 .600

BETA
 .090
 4.170

MACH
 .589

PARAMETRIC VALUES
 ALPHA
 ELEVON
 .000
 .000
 .000
 .000
 .000
 .000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RSPVOS) OPEN AVES 11-707 0A12 02A
 (RSPROS) FLAGGED AVES 11-707 0A12 02A

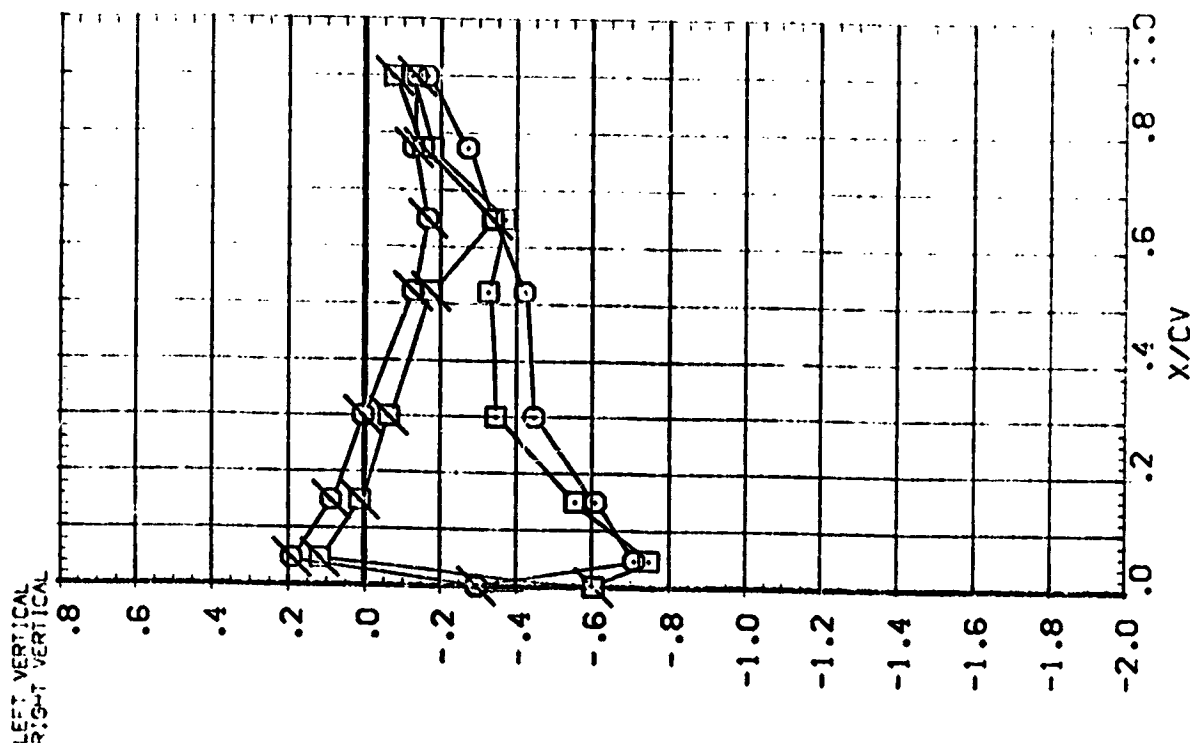
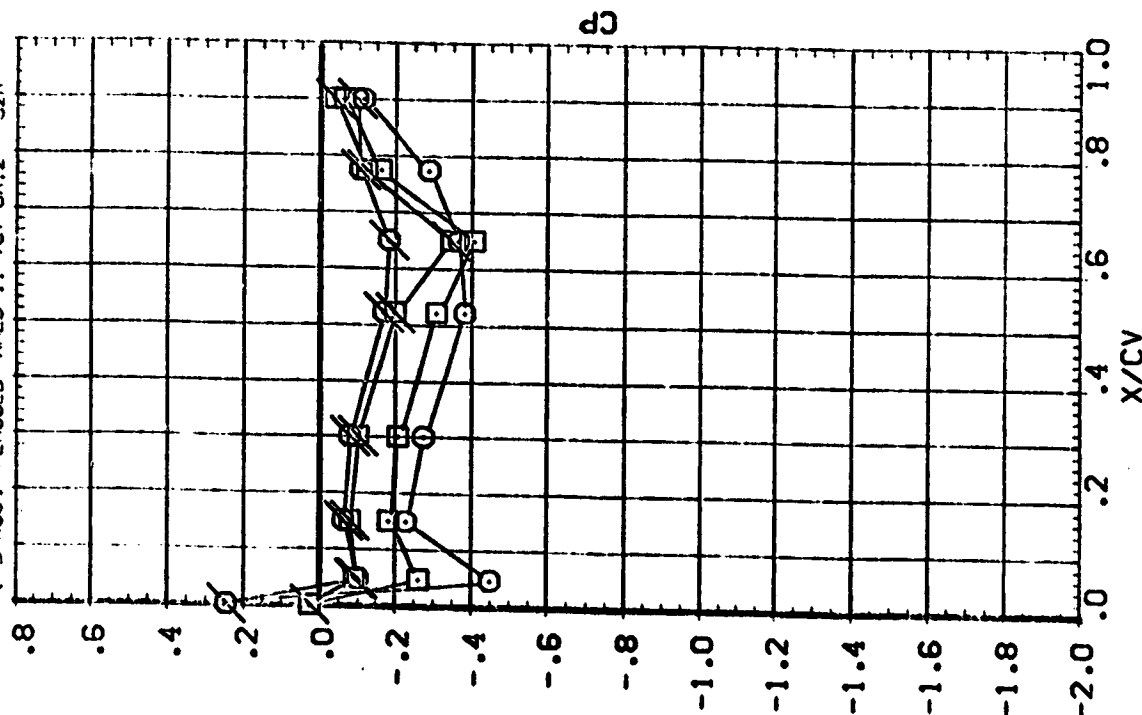


CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

SYMBOL Z/B/ BETA MACH
 () .843 .380 .599
 [] .925 4.170

PARAMETER VALUES
 ALPHA 10.000 9.000 -10.000
 ELEVON .000 9.000 .000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RBRVC9) OPEN AMES 11-707 OA12 C2A
 (RBRRC9) FLAGGED AMES 11-707 OA12 C2A



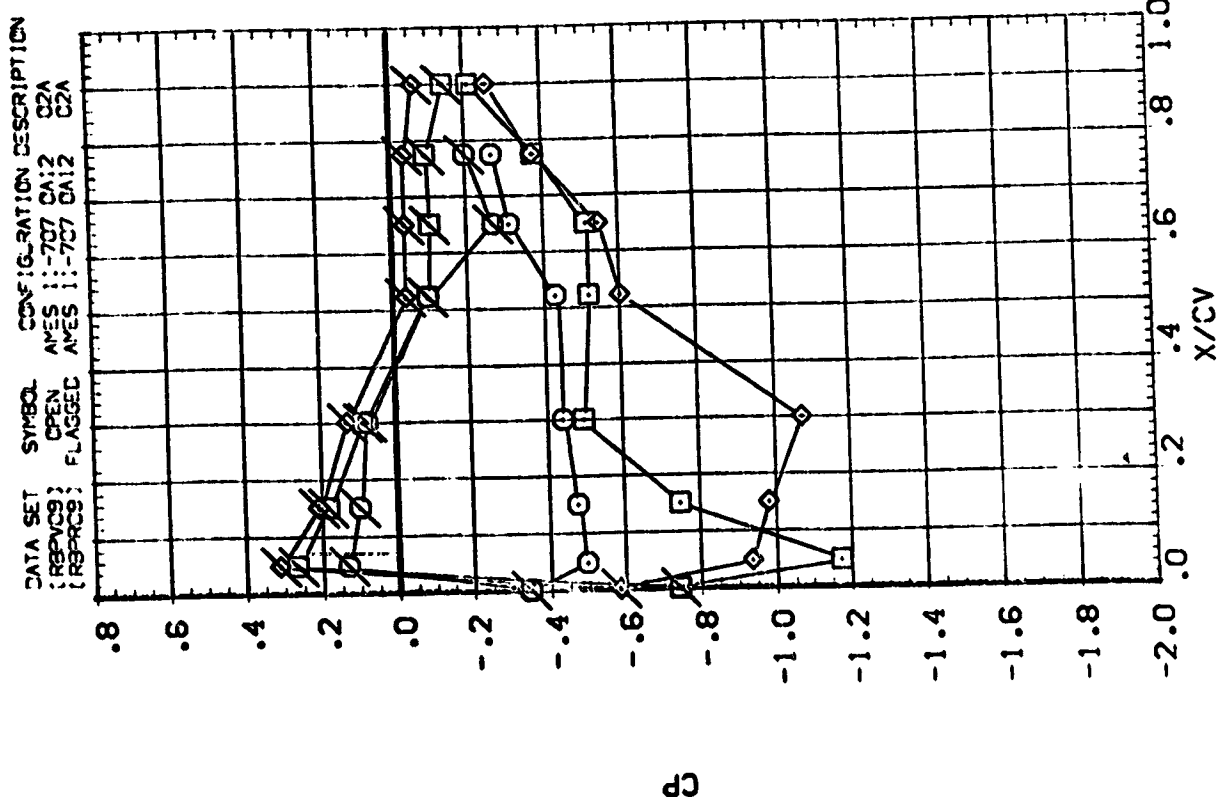
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 10.000 RUDDER -10.000
 .000 RUDDER .000

ALPHA
 ELEVON

SYMBOL Z/BV BETA MACH
 .158 8.240 .599
 .316
 .600

LEFT VERTICAL
 RIGHT VERTICAL



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

DISTURBANCE VALUES
 0.000 0.000 0.000
 0.000 0.000 0.000
 0.000 0.000 0.000

ALPHA
 0.000

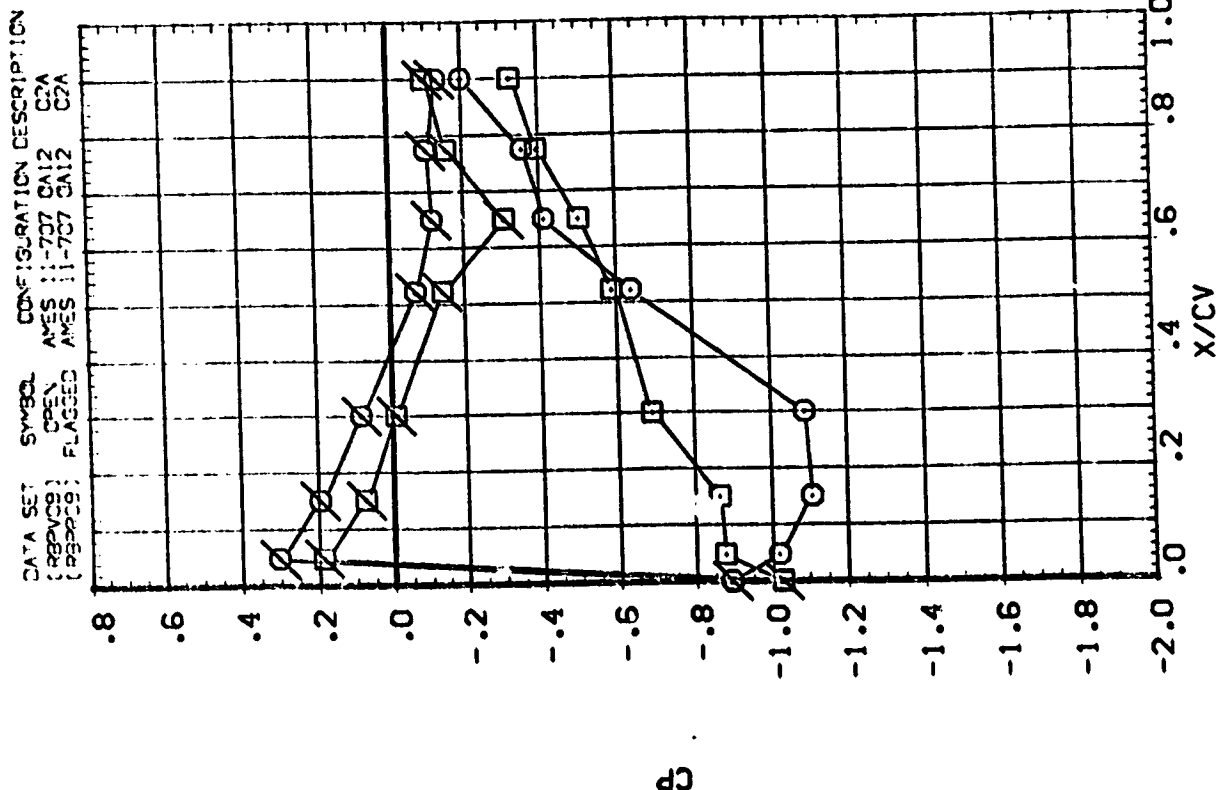
MAC= .599

BETA= 8.240

Z/B= .840

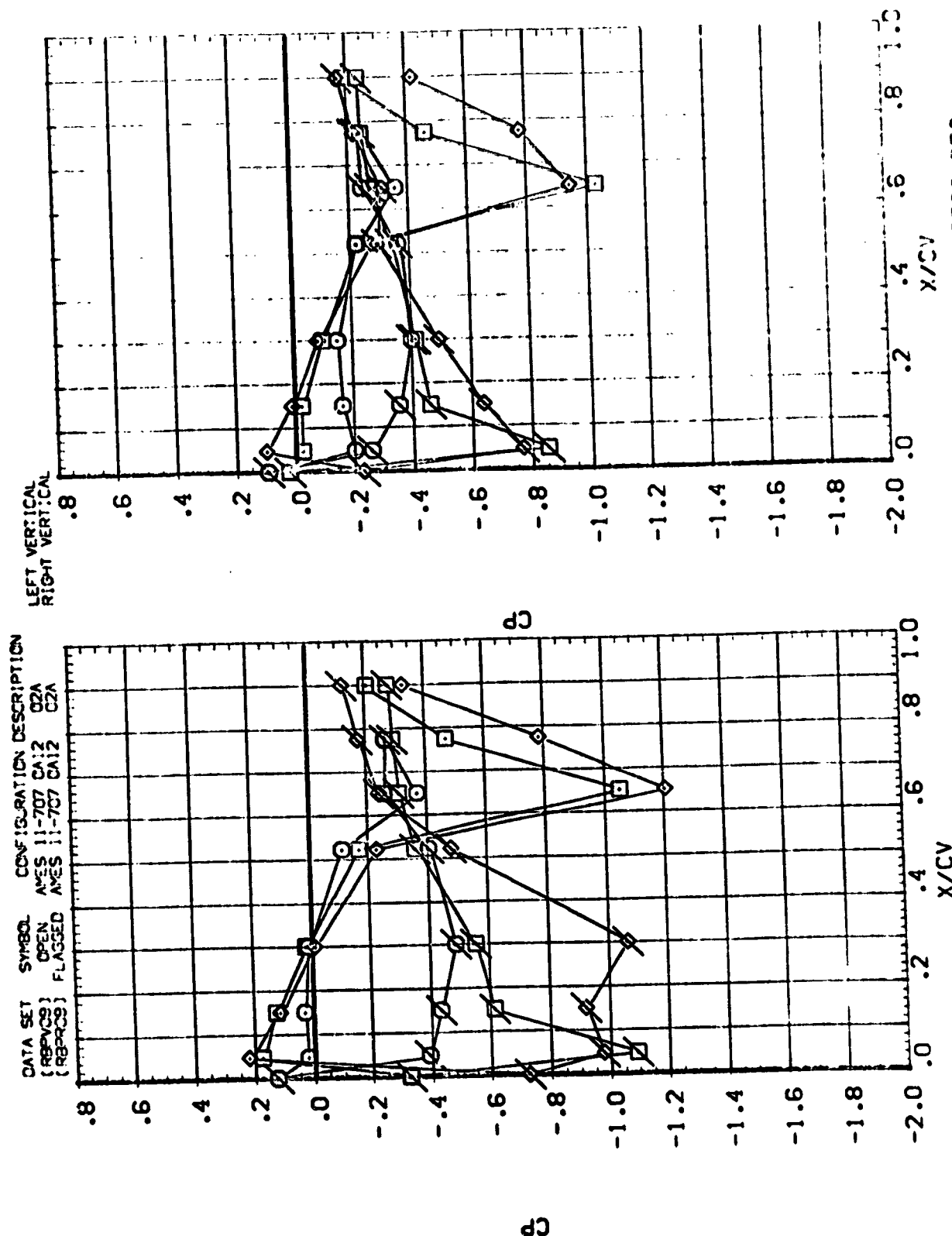
SYNCL= .925

LEFT VERTICAL
 RIGHT VERTICAL



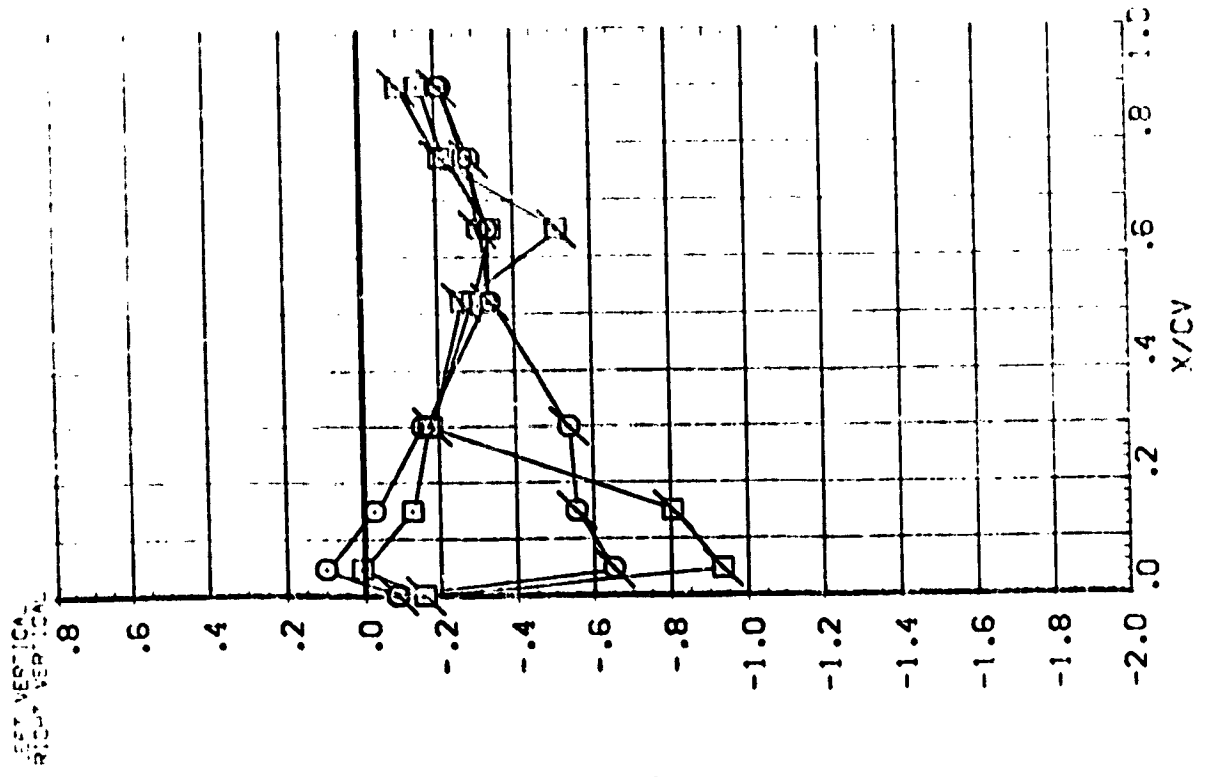
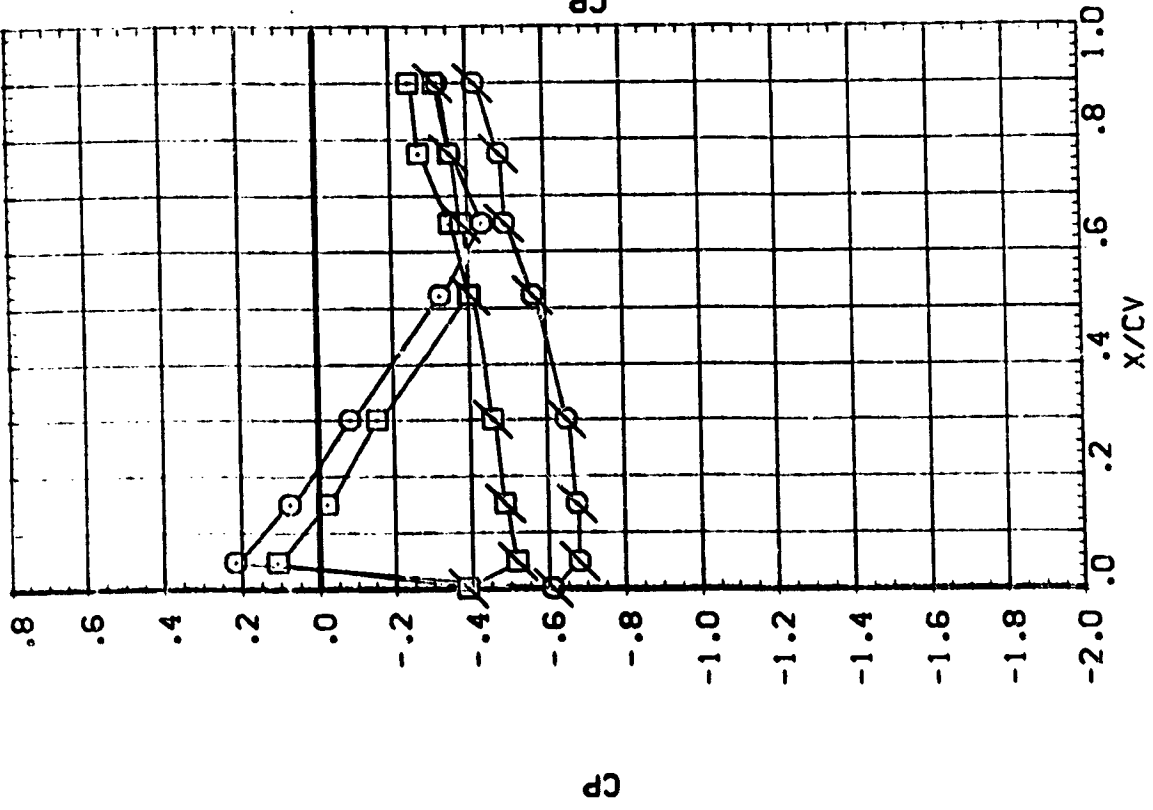
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL WALL PRESSURES
 PAGE 3

SYMBOL	Z/BV	BETA	MACH
○	.158	-8.160	.904
□	.316	-4.042	
◇	.603		



CHROMWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

DATA SET SVSBL CONFIGURATION DESCRIPTION
 (333-00) CRYN AMES 11-707 GA12 CPA
 (333-00) FLAGGED AMES 11-707 GA12 CPA

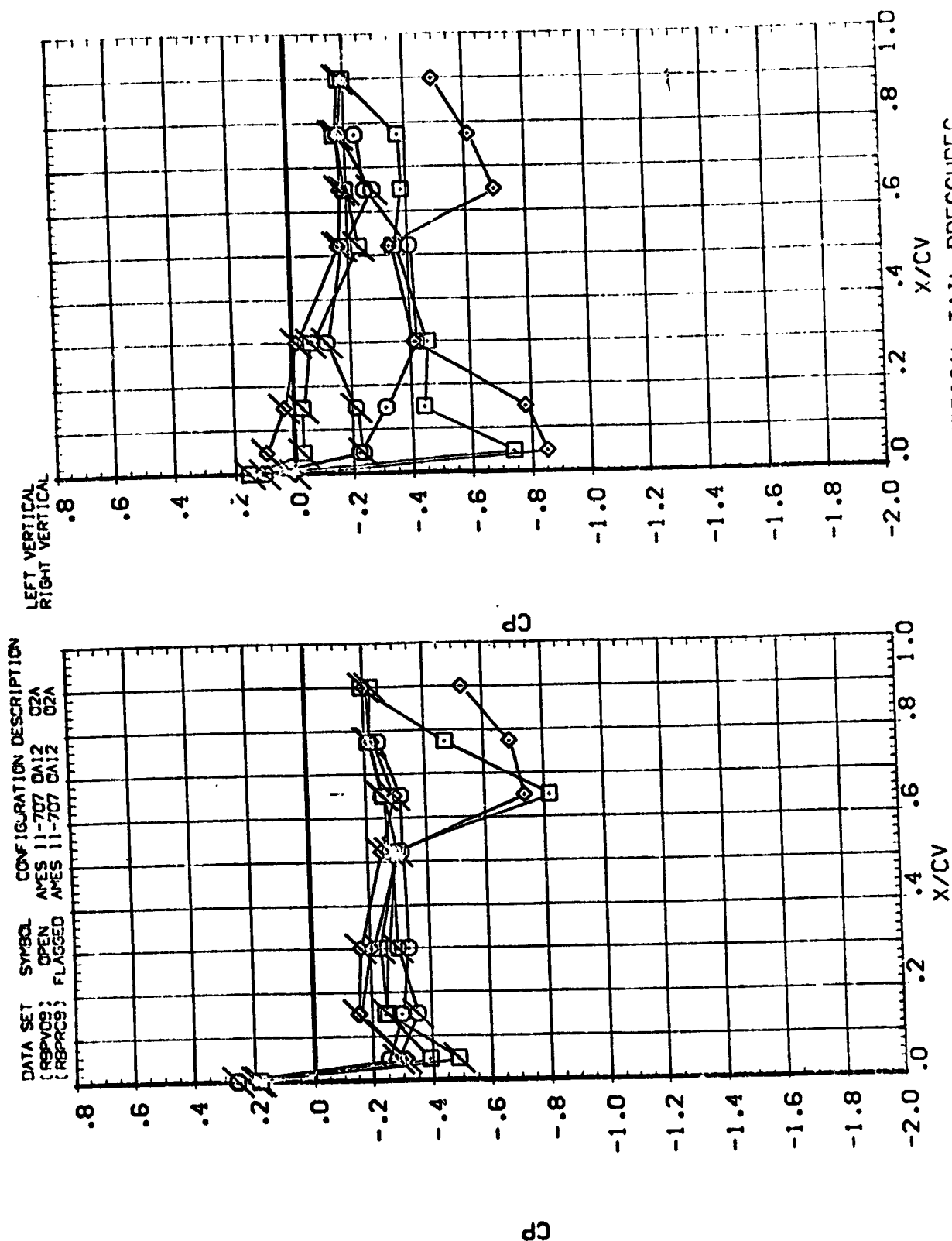


CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES



SYMBOL Z/BV BETA MACH
 .158 .090 .904
 .316 4.200
 .600

PARAMETRIC VALUES
 ALPHA 10.000
 ELEVON .000
 RUDDER -10.000
 RUDDER .000

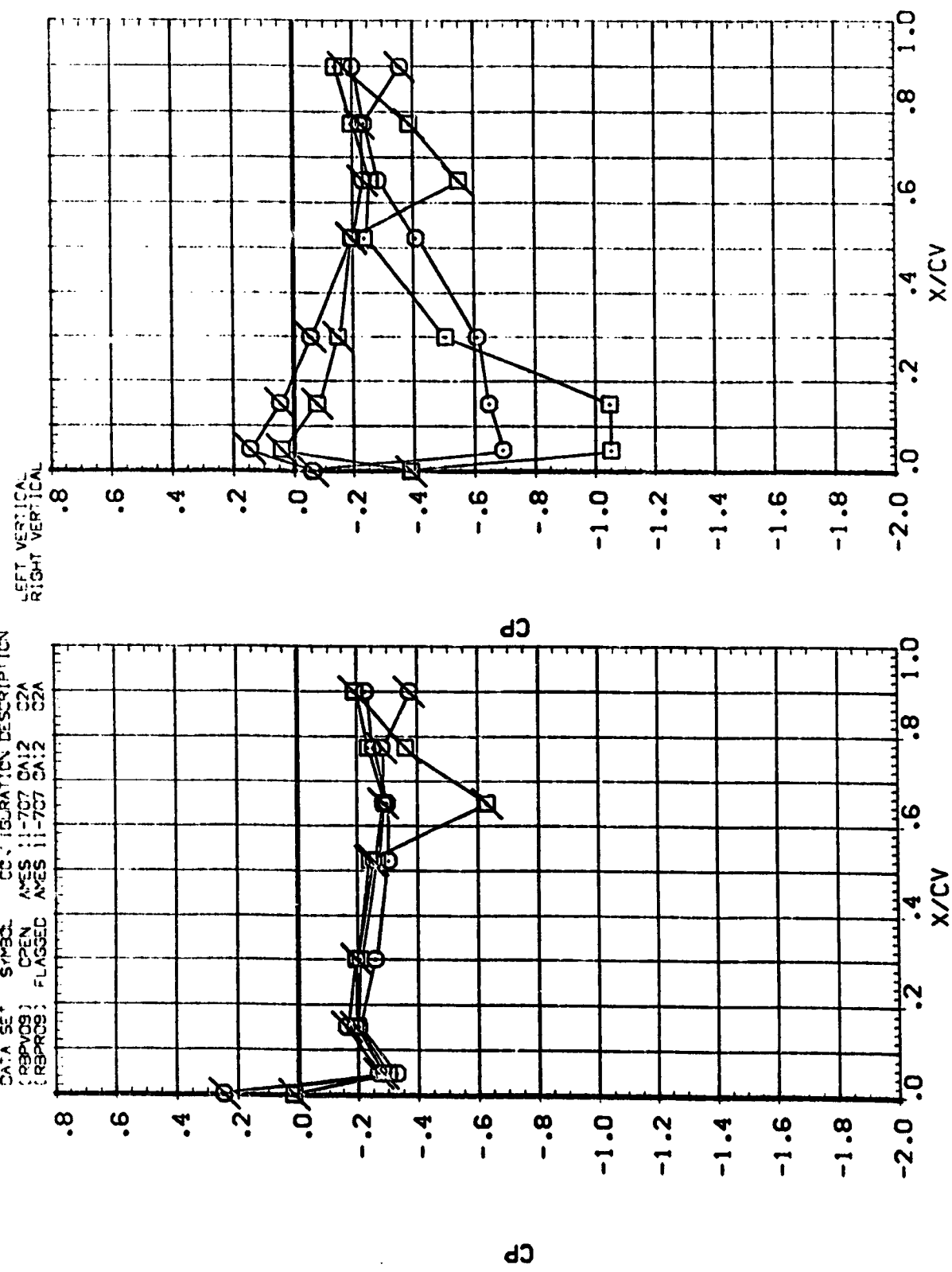


CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 ALPHA 10.000
 ELEVEN 10.000
 ELEVEN 10.000

SYMBOL Z/BV BETA MACH
 .84C .08C .904
 .925 4.200

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RBPV09) OPEN AXES 11-707 CA12 C2A
 (RBPV09) FLAGGED AXES 11-707 CA12 C2A



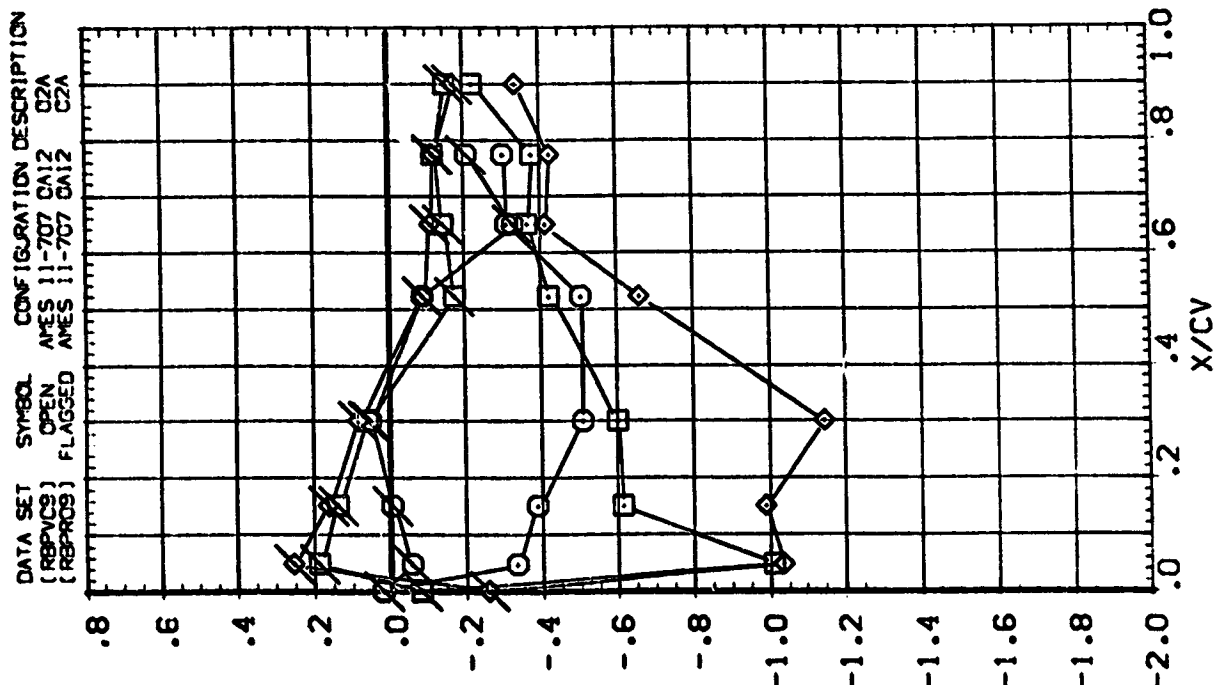
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES



SYMBOL Z/BV BETA MACH
□ .158 8.330 .904
○ .316
◇ .600

PARAMETRIC VALUES
ALPHA .00000 RUDDER -10.000
ELEVON .000 RUDEL R .000

LEFT VERTICAL
RIGHT VERTICAL

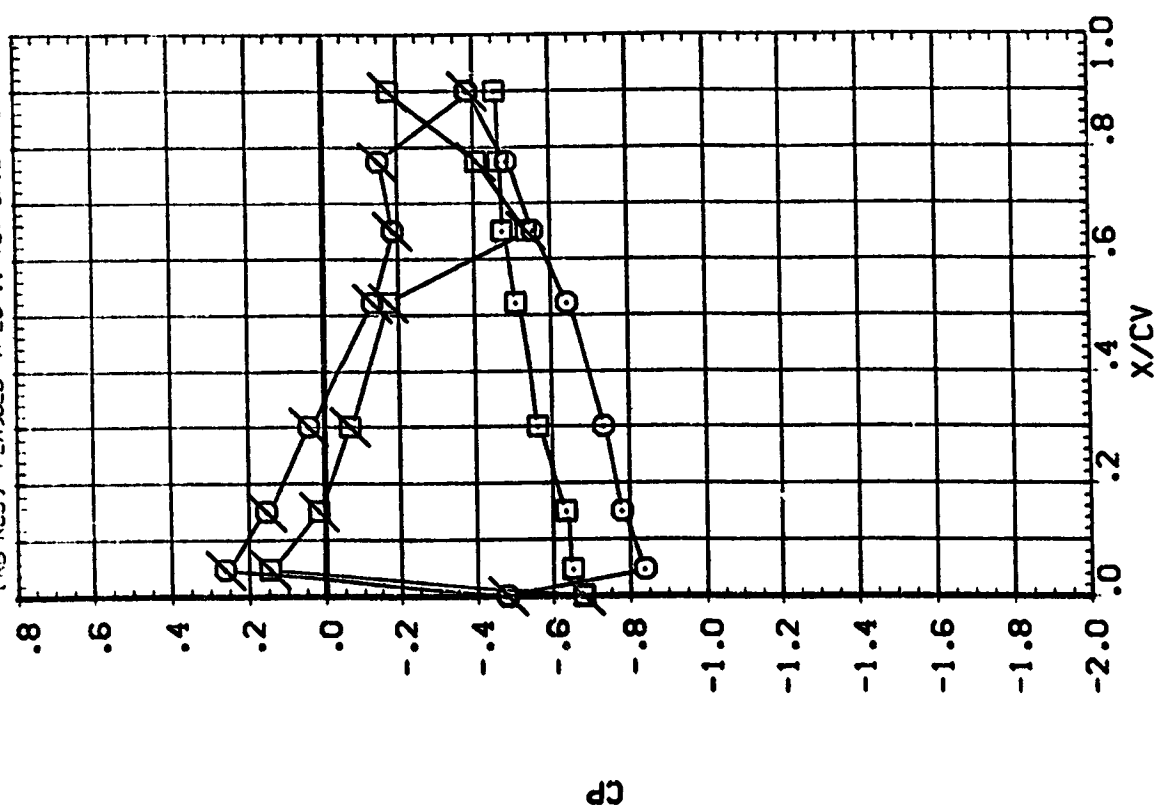


CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETER VALUES
 ALPHA 0.0000
 ELEVON 0.0000
 RUDER 0.0000
 10.0000
 0.0000

SYMBOL Z/BV BETA MACH
 O .940 8.330 .904
 □ .925

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RSPV09) OPEN AMES 11-707 CA12 C2A
 (RSPV09) FLAPPED AMES 11-707 CA12 C2A



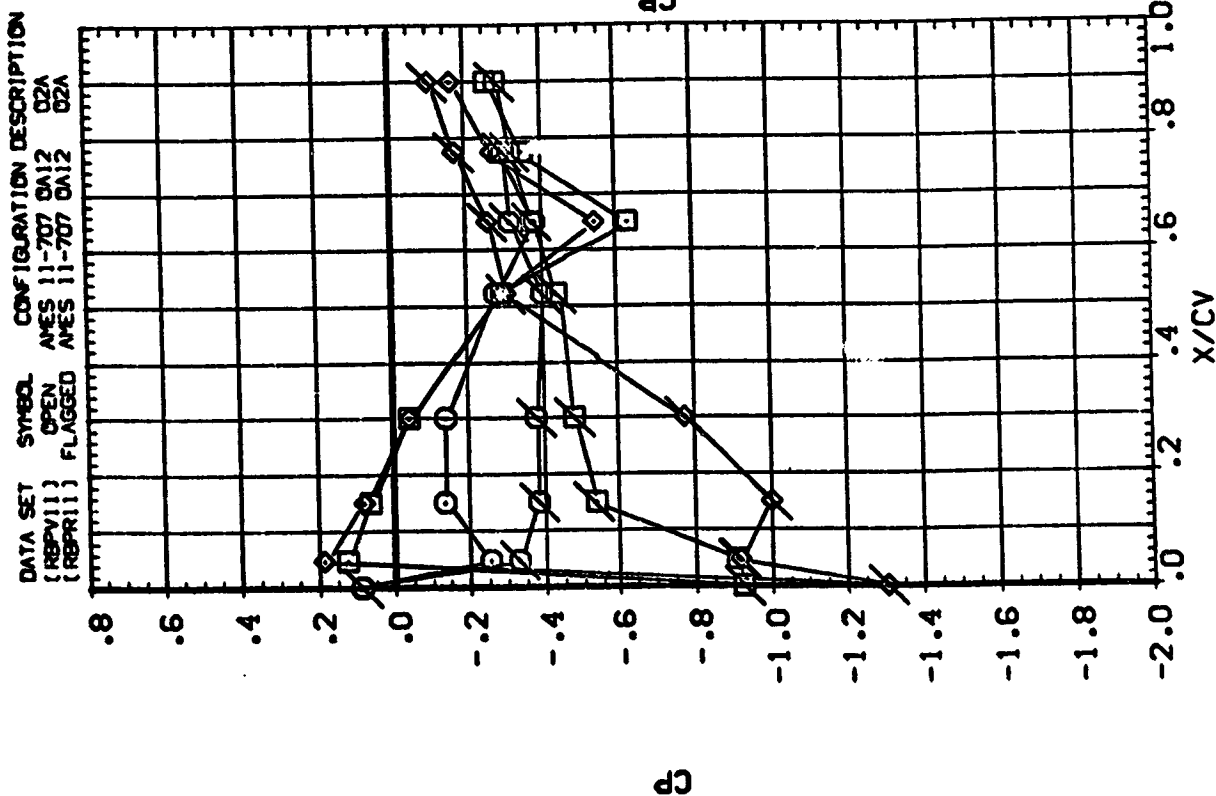
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES

ALPHA	20.000	RJ00R	-10.000
ELEVON	.000	RJ0FLR	.000

SYMBOL Z/BV BETA MACH

SYMBOL	Z/BV	BETA	MACH
○	.158	-7.990	.598
□	.316	-3.960	
◇	.600		



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES

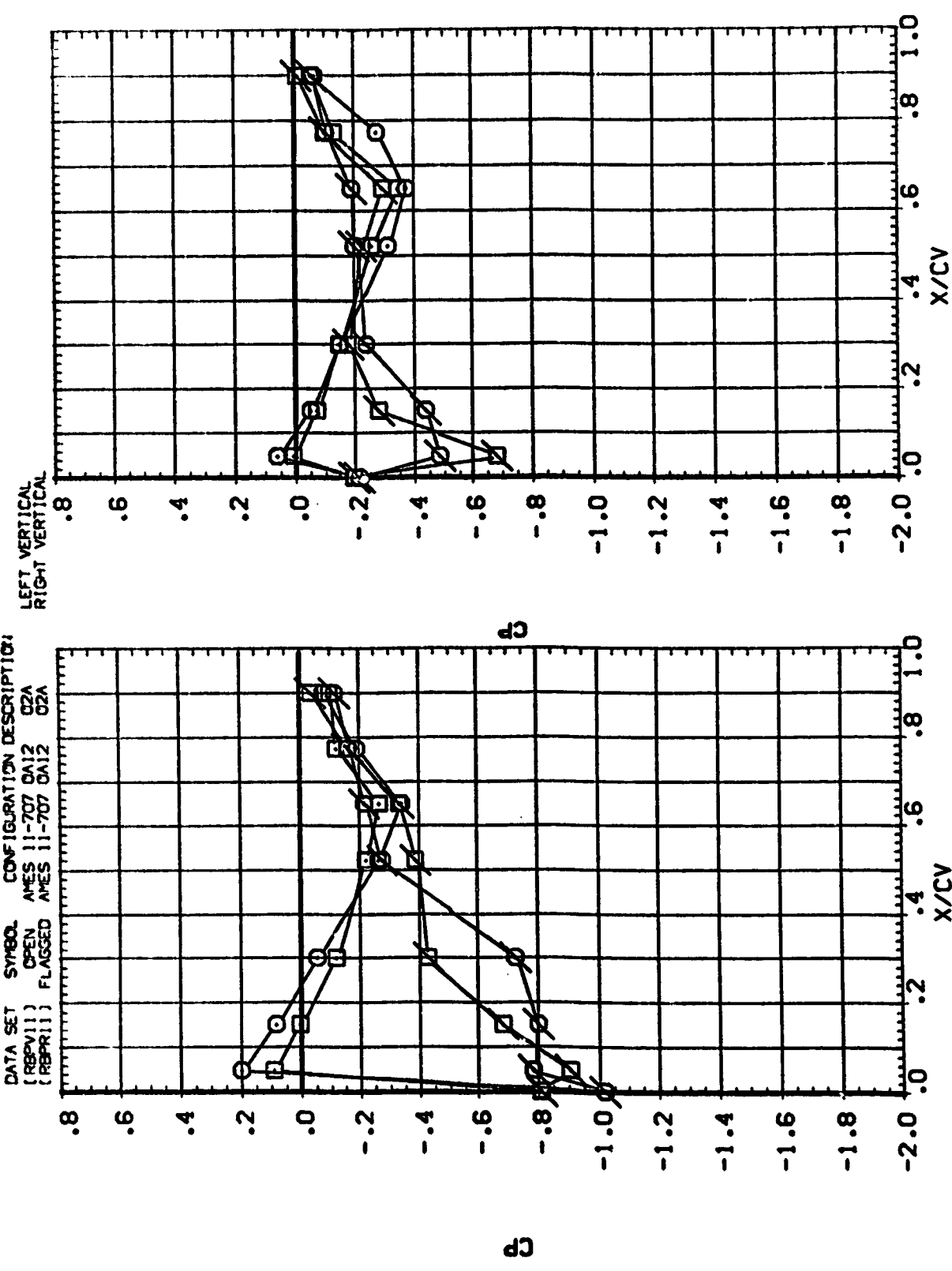
ALPHA	20.000	RUDDER	-10.000
ELEVON	.000	R. FLR	.000

SYMBOL Z/BV BETA MACH

○	.840	-7.990	.599
□	.925	-3.960	

DATA SET SYMBOL CONFIGURATION DESCRIPTION

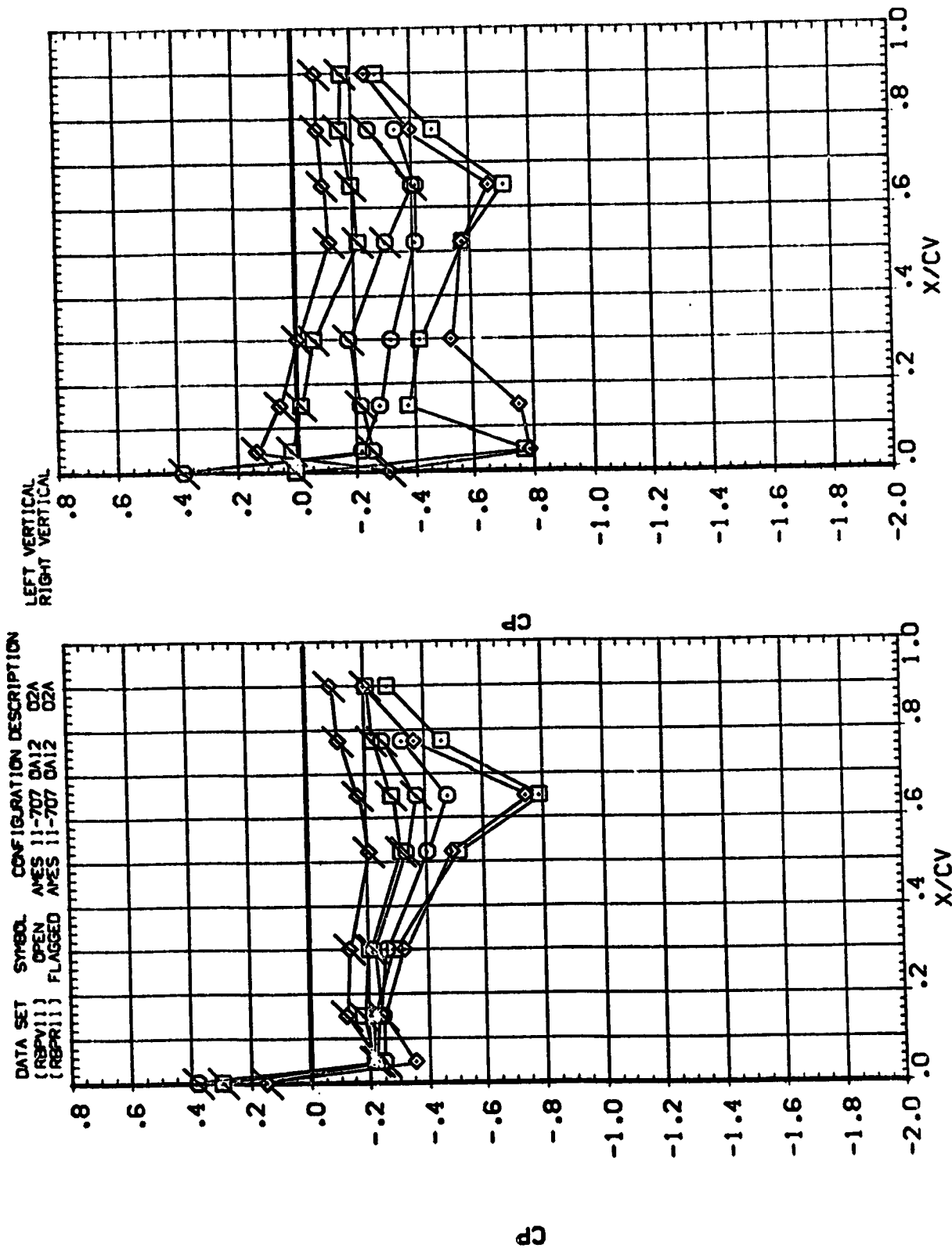
(RBPV11)	OPEN	AMES 11-707 DA12	OZA
(RBPV11)	FLAGGED	AMES 11-707 DA12	OZA



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 ALPHA 20.000 RUDDER -10.000
 ELEVON .000 RUOFLR .000

SYMBOL Z/BV BETA MACH
 .158 .050 .598
 .316 4.190
 .600



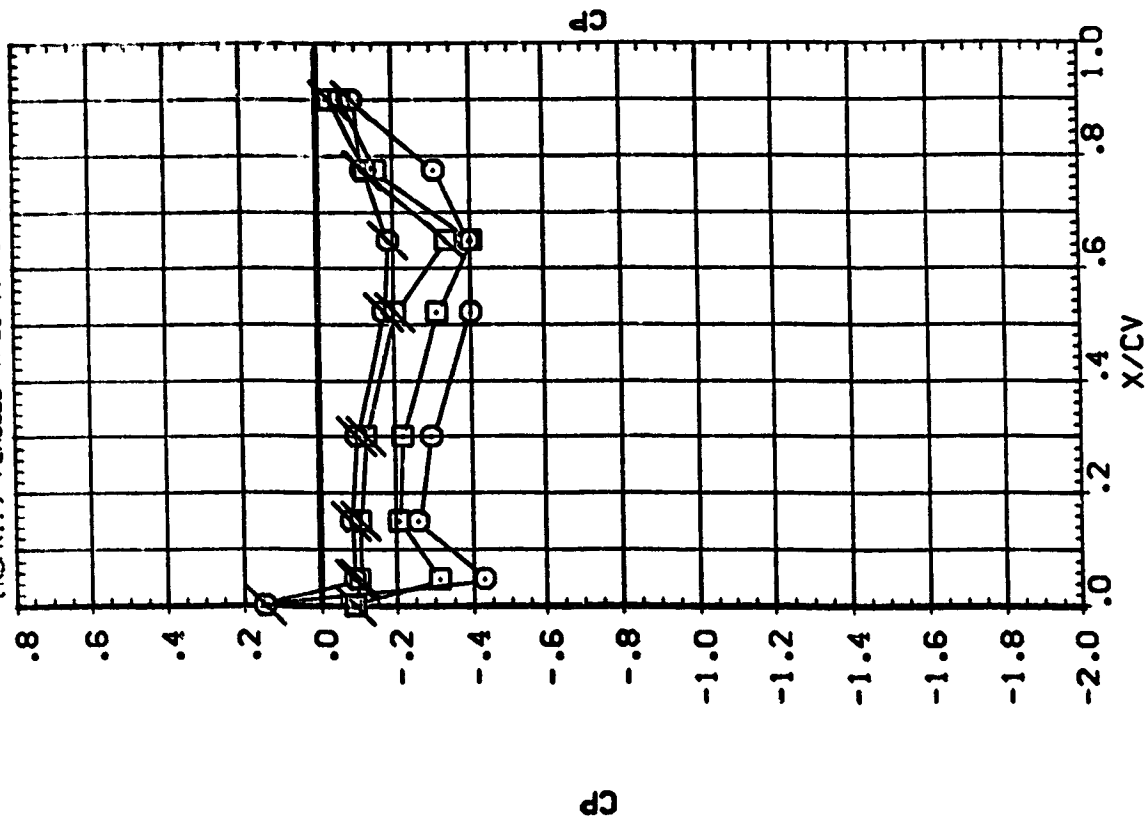
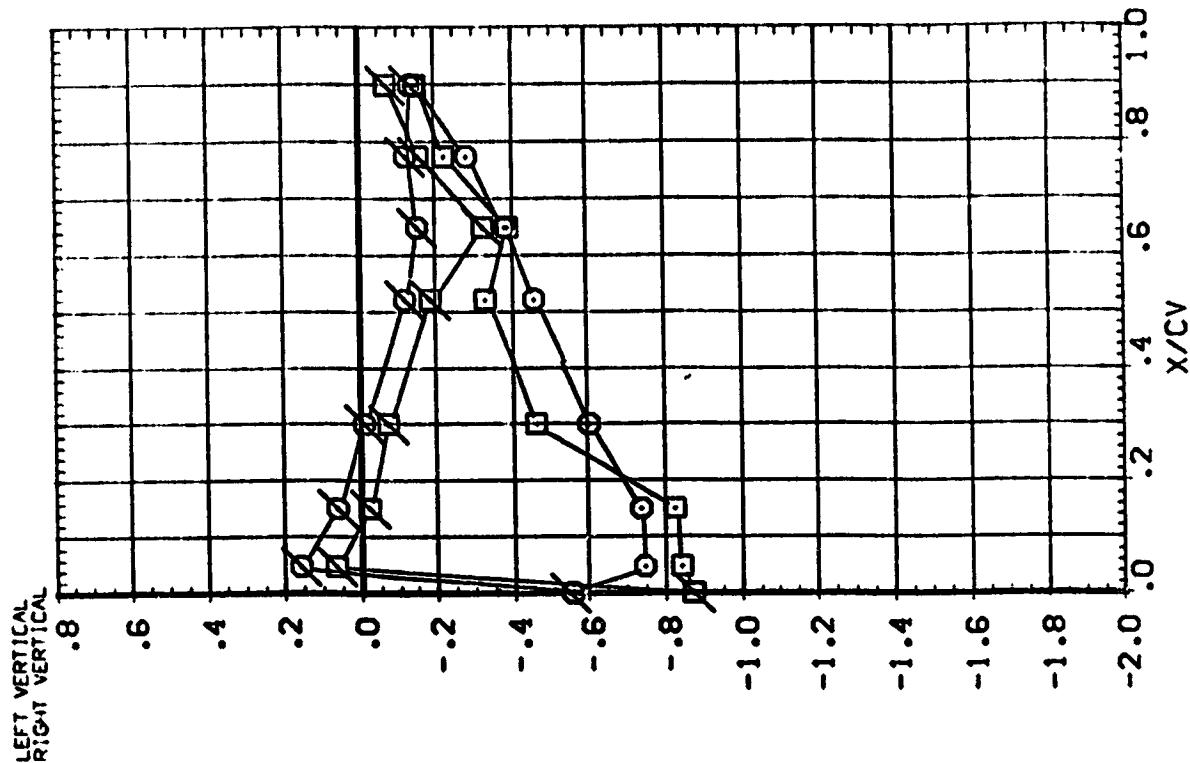
CLOCKWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 20.000 RUDDER -10.000
 .000 RUDDER .000

ALPHA
 ELEVON

SYMBOL Z/8V SC/TA MACH
 .840 .090 .598
 .925 4.190

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [RBPV11] OPEN AMES 11-707 CA12 C2A
 [RBPV11] FLAGGED AMES 11-707 CA12 C2A



CLOCKWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 20.000 RUDDER -10.000
 .000 RUOFLR .000

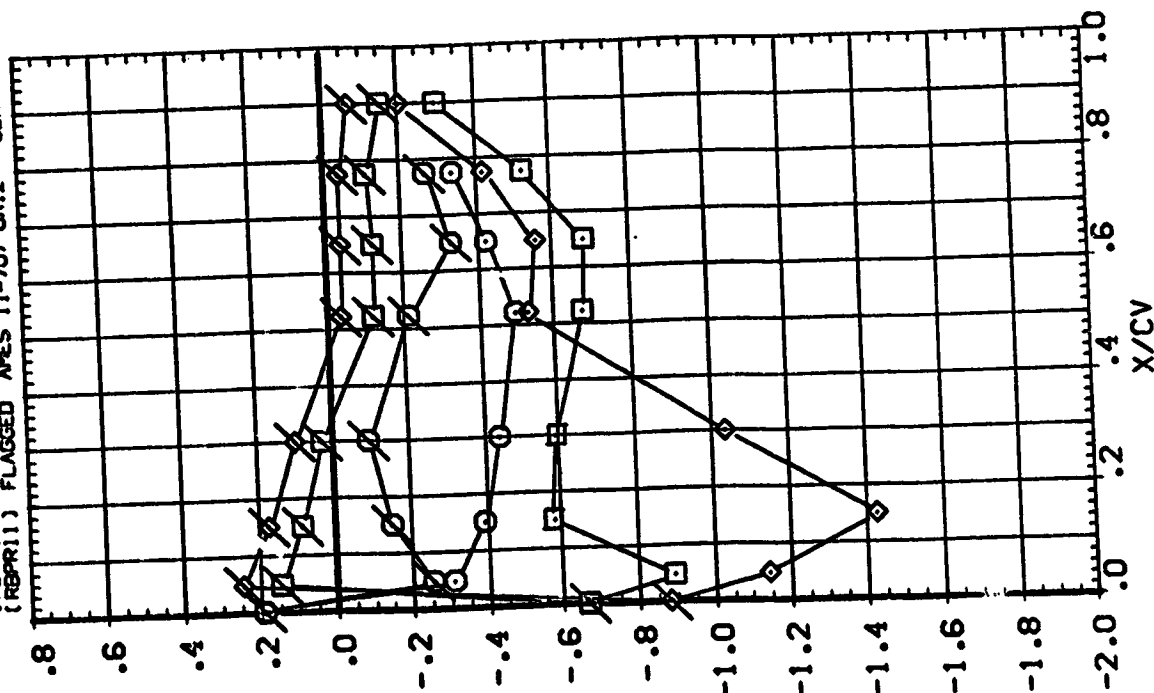
ALPHA
 ELEVON

BETA 8.310 MACH .598

SYMBOL Z/BV
 .158
 .316
 .600

LEFT VERTICAL
 RIGHT VERTICAL

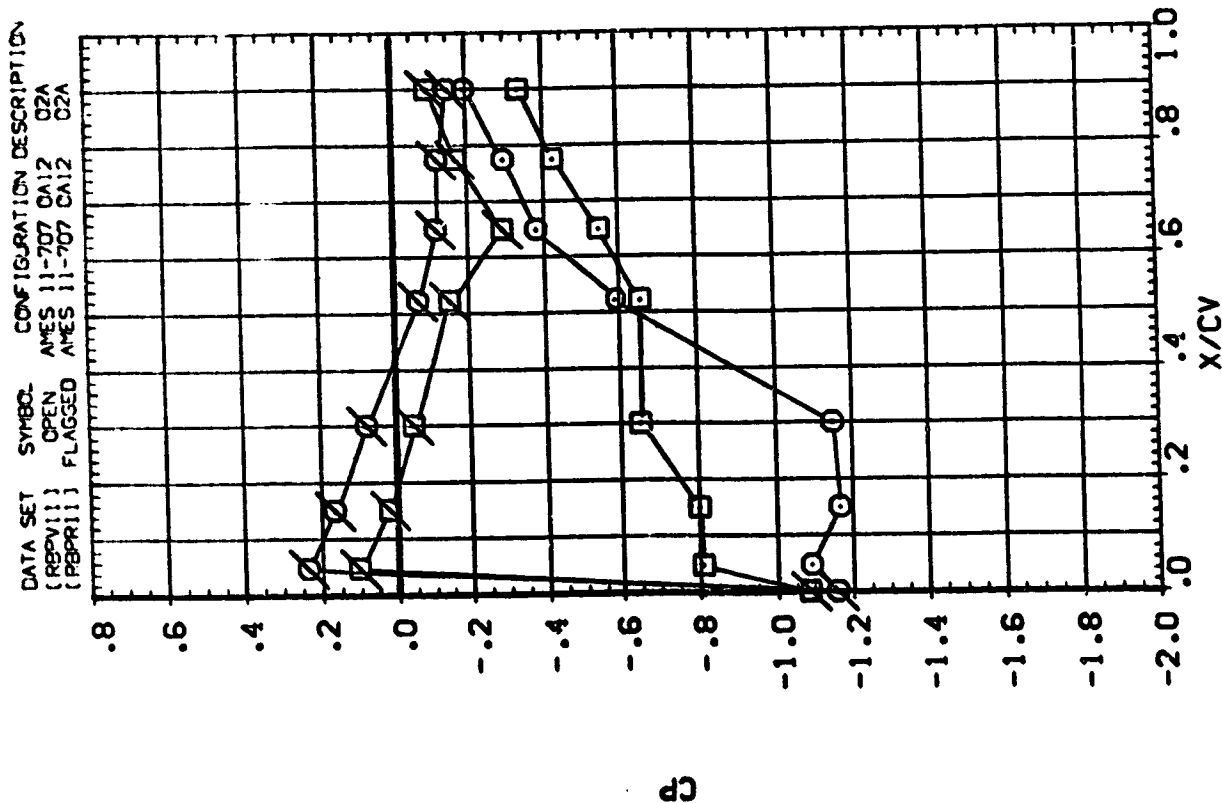
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RBPV111) OPEN APES 11-707 DA12 OZA
 (RBPV111) FLAGGED APES 11-707 DA12 OZA



ALPHA
MCA 573

SYMBOL	Z/θV	BETA	MACH
01	.840	0.310	.598
02	.925		

LEFT VERTICAL-
RIGHT VERTICAL



X/CV	CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES						PAGE
0.00							
0.05							
0.10							
0.15							
0.20							
0.25							
0.30							
0.35							
0.40							
0.45							
0.50							
0.55							
0.60							
0.65							
0.70							
0.75							
0.80							
0.85							
0.90							
0.95							
1.00							

PARAMETRIC VALUES

ALPHA	20.000	RUDER	-10.000
ELEVON	.000	RUDFLR	.000

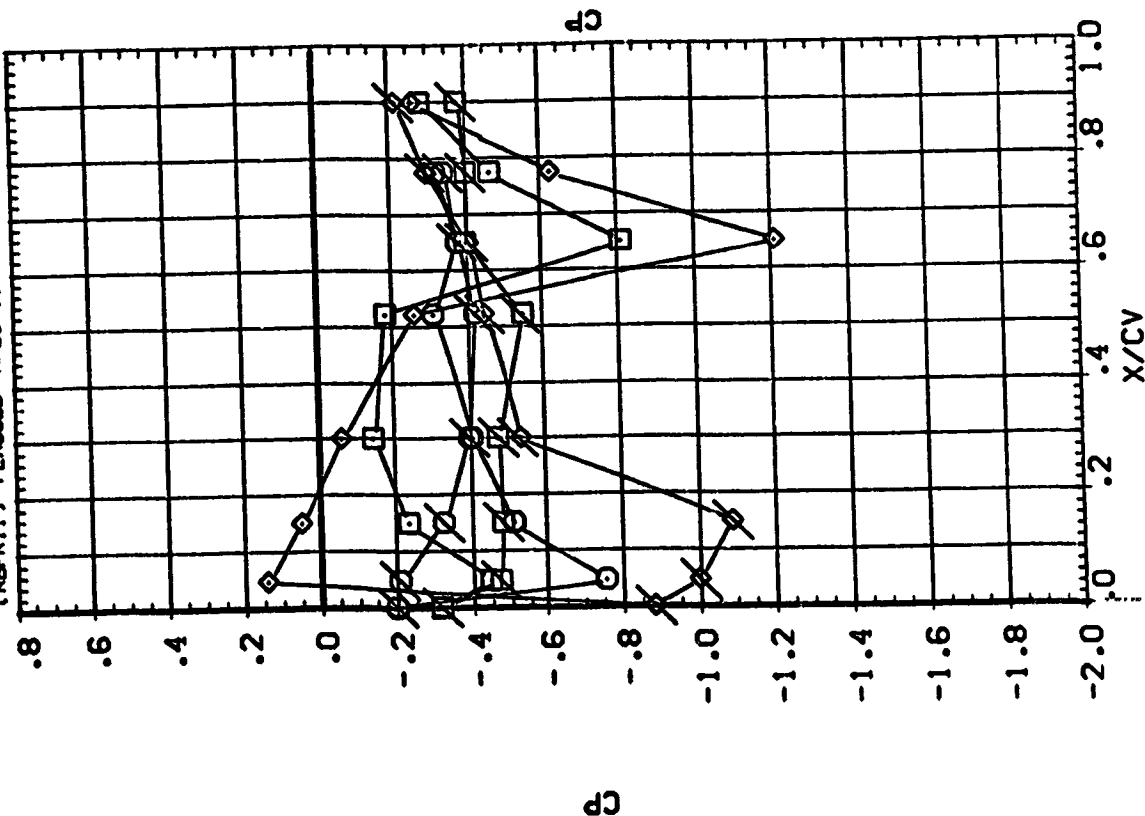
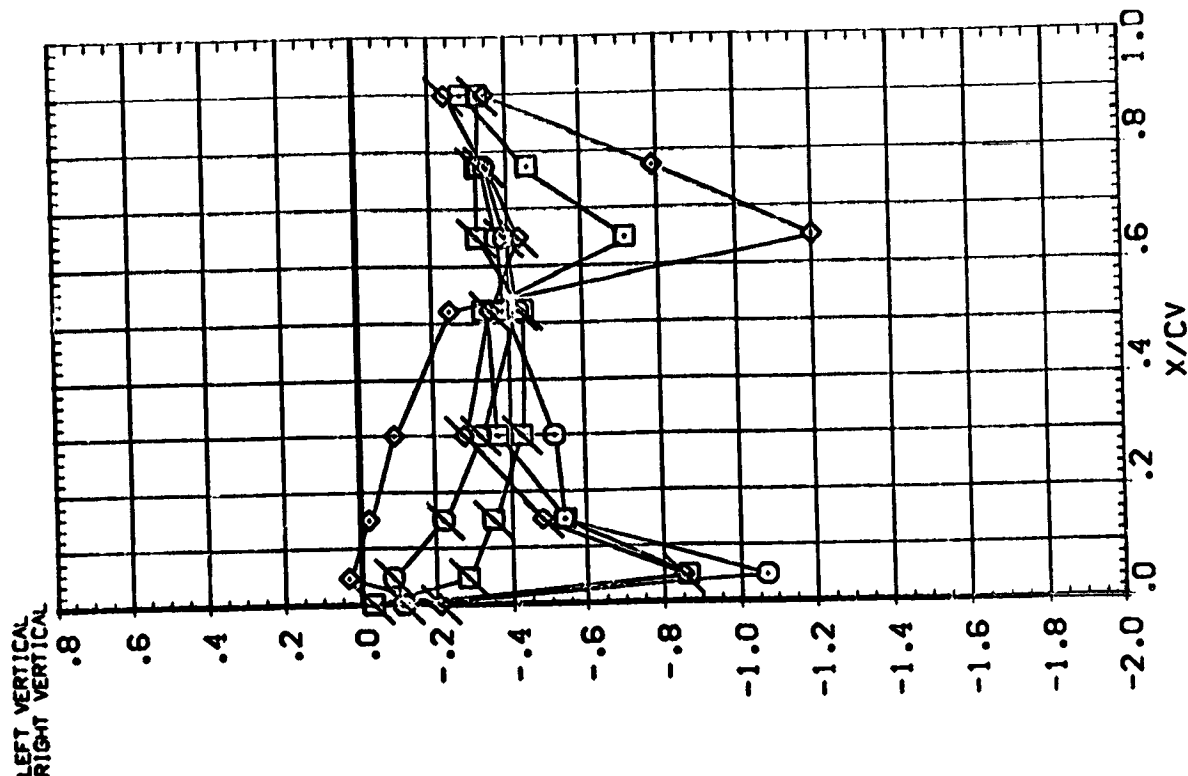
SYMBOL

Z/BV	BETA	MACH
.158	-8.060	.903
.316	-3.980	
.600		

○ □ ◇

DATA SET SYMBOL CONFIGURATION DESCRIPTION

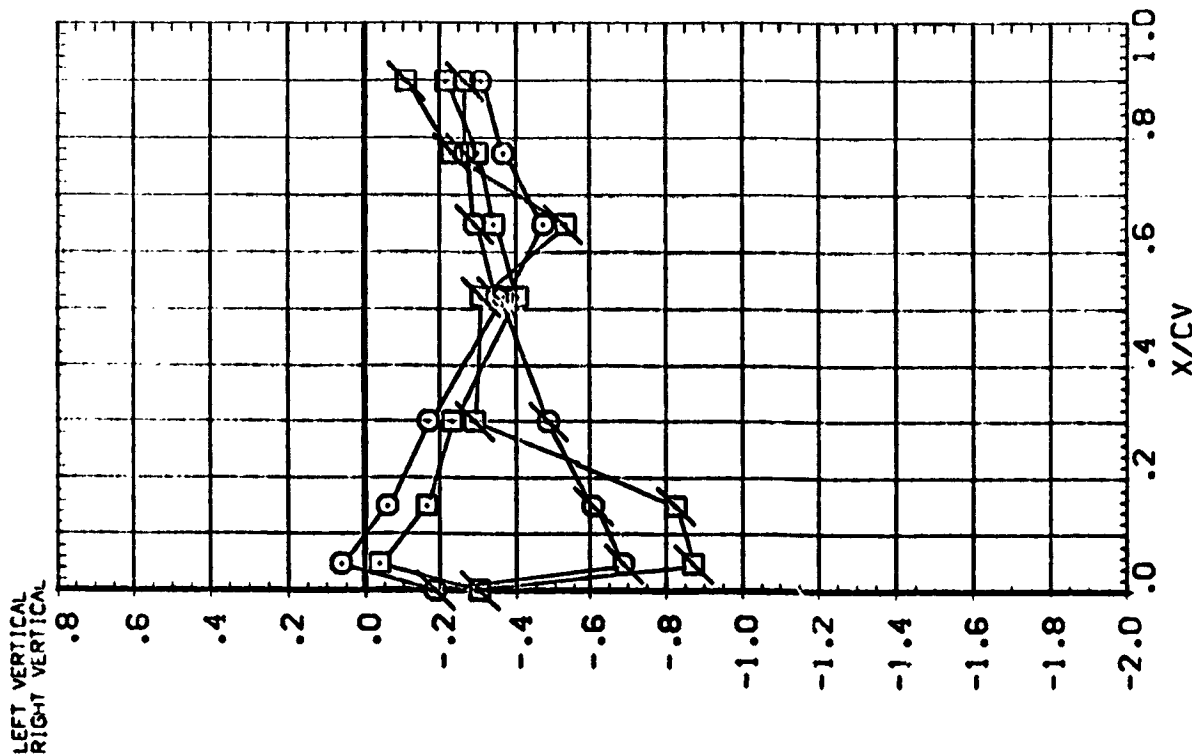
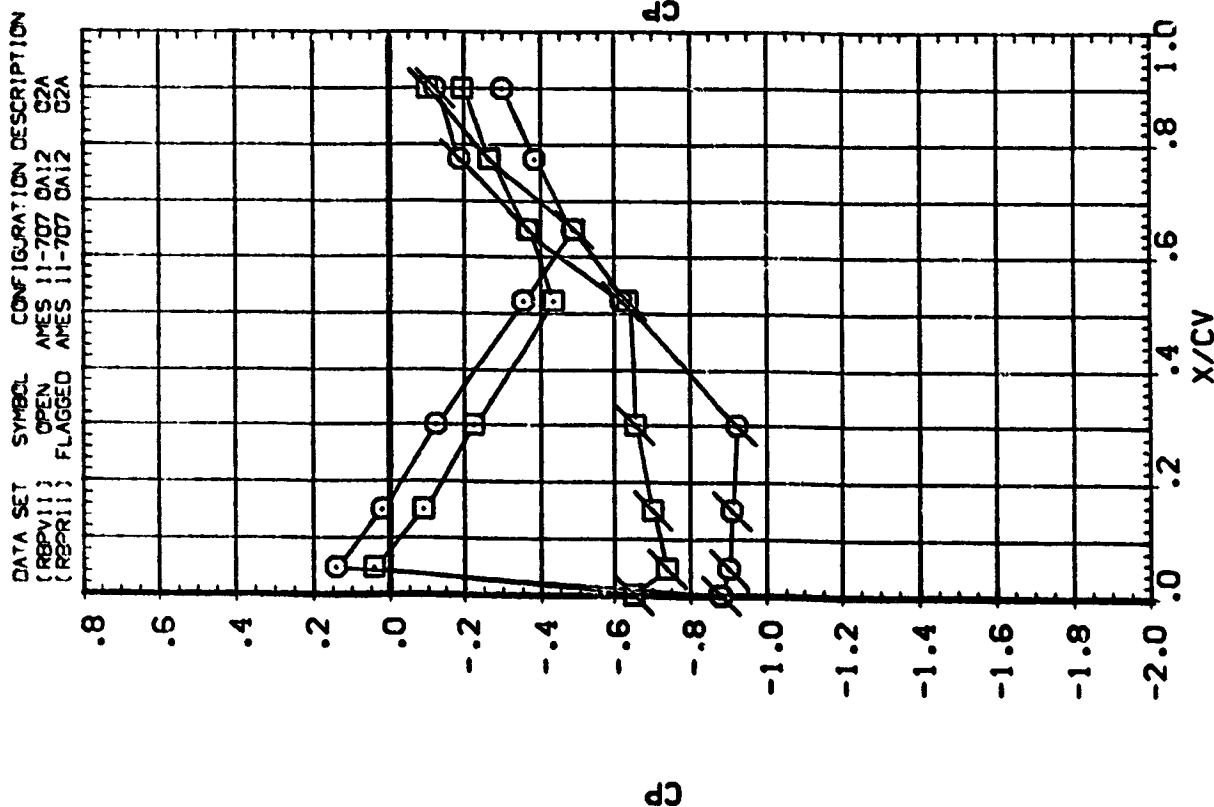
[RBPV11]	OPEN	AVES 11-707 DA12	O2A
[RBPV11]	FLAGGED	AVES 11-707 DA12	O2A



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 ALPHA 20.000 RADIUS 10.000
 ELEVON .000 RUFFLE .000

SYMBOL Z/B/ BETA MACH
 .840 -8.050 .903
 .975 -3.980



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

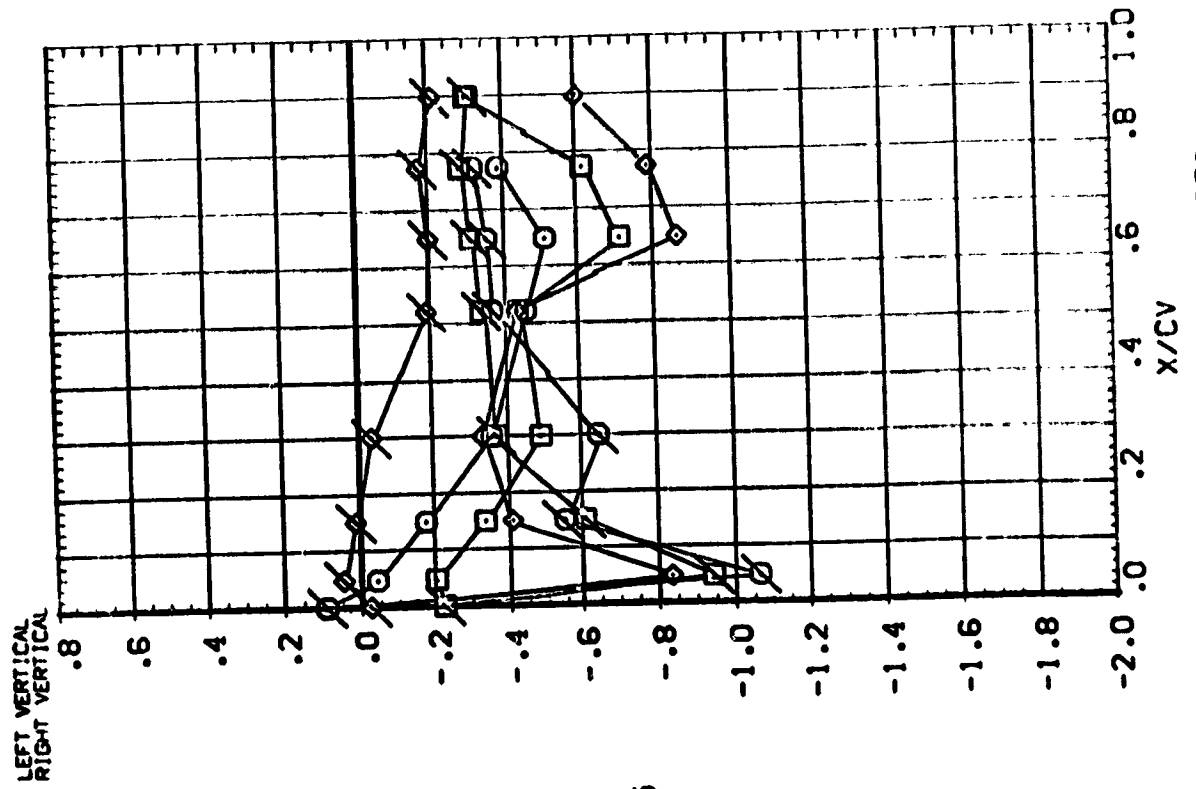
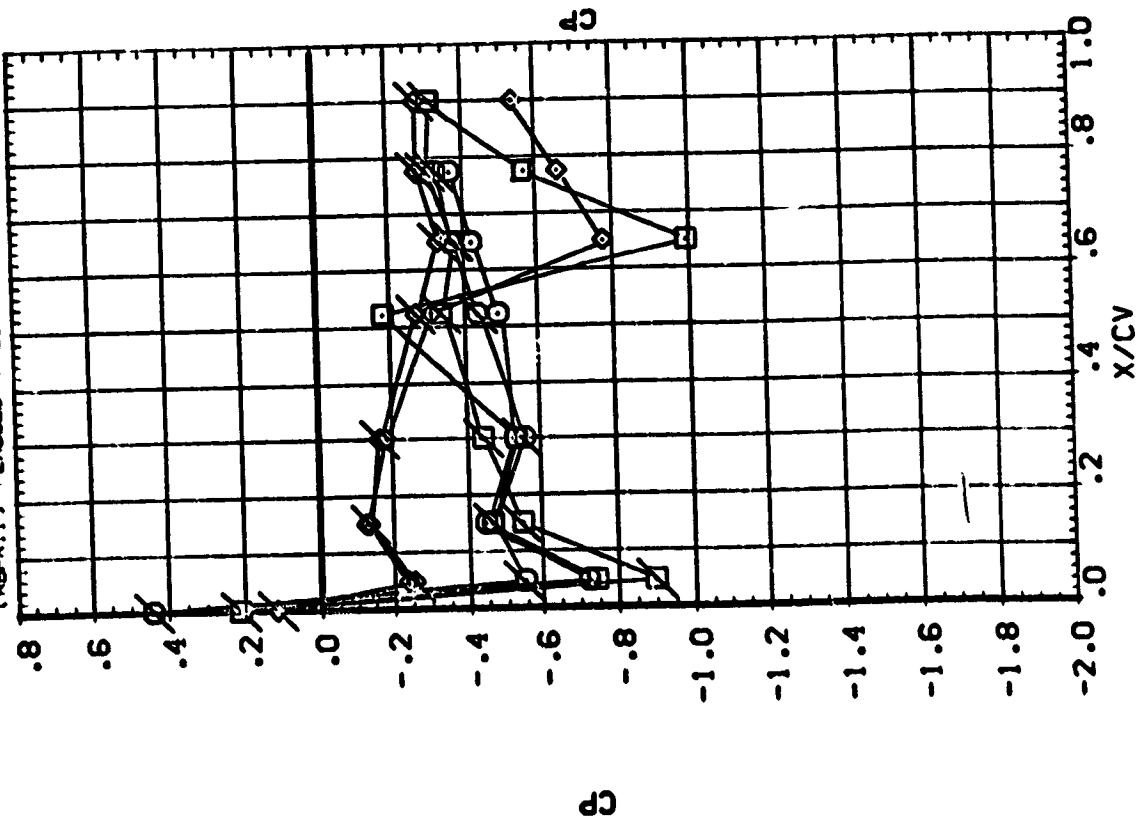
III

SYMBOL Z/8V BETA MACH
 .158 .080 .903
 .316 4.230
 .600

ALPHA ELEVON
 20.000 RUDER
 .000 RUDER
 -10.000

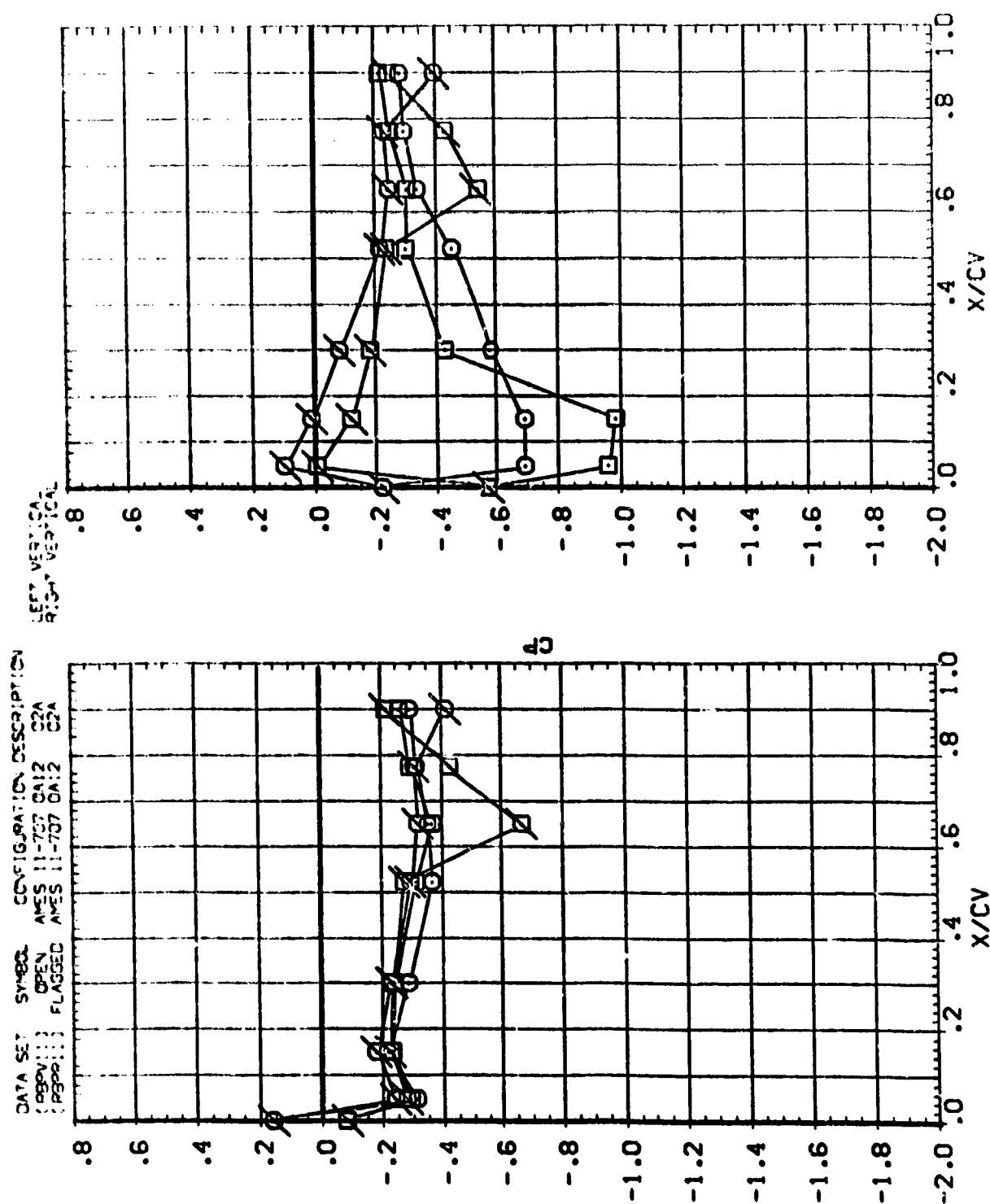
PARAMETRIC VALUES
 20.000 RUDER
 .000 RUDER
 -10.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RBPV11) OPEN APES 11-707 DA12 02A
 (RBPV11) FLAGGED APES 11-707 DA12 02A



100

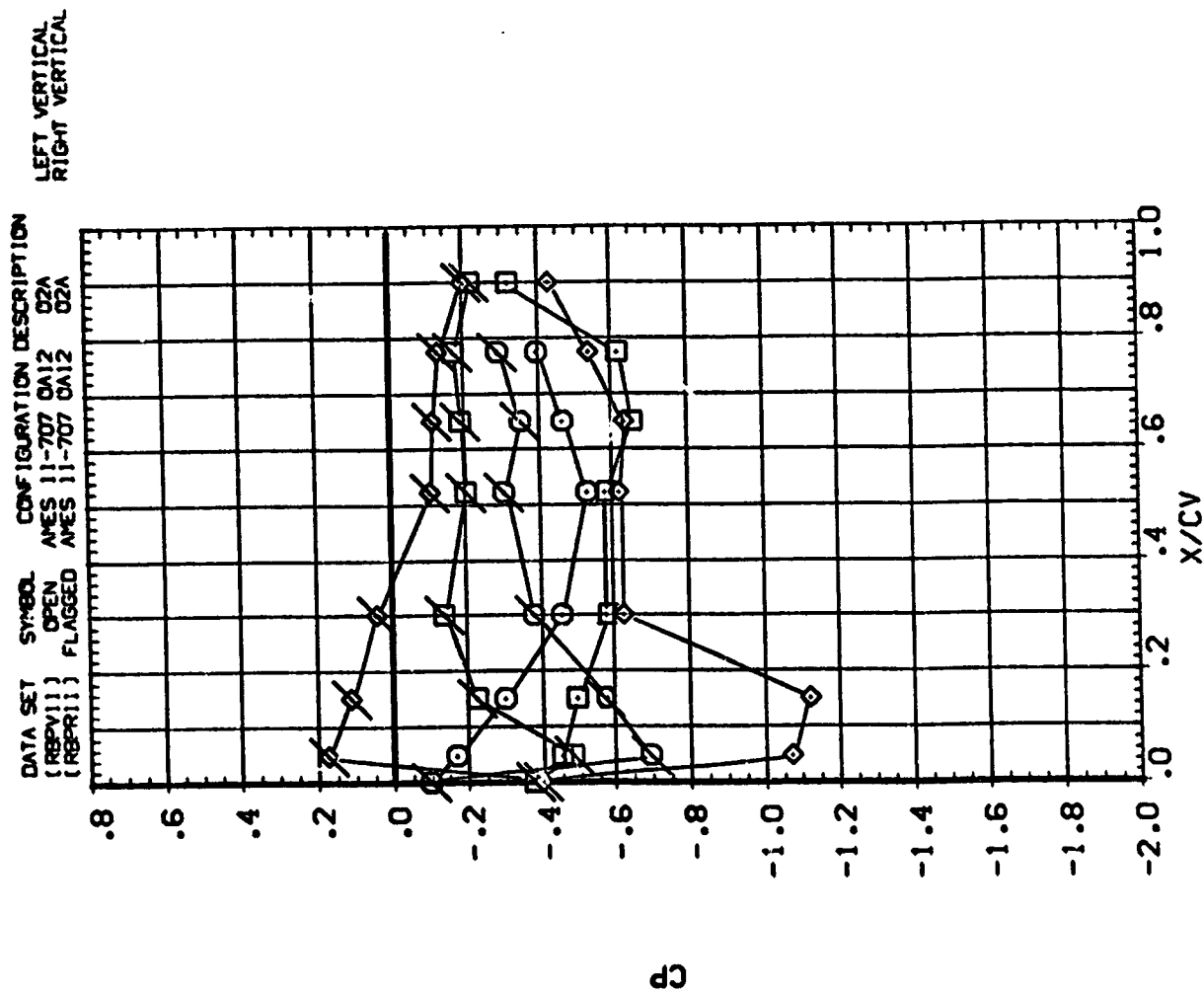
60
60
60
60



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

SYMBOL Z/BV BETA MACH
 O .158 8.360 .903
 □ .316
 ◇ .600

PARAMETRIC VALUES
 ALPHA 20.000 RUDDER -10.000
 ELEVON .000 RUDFLR .000

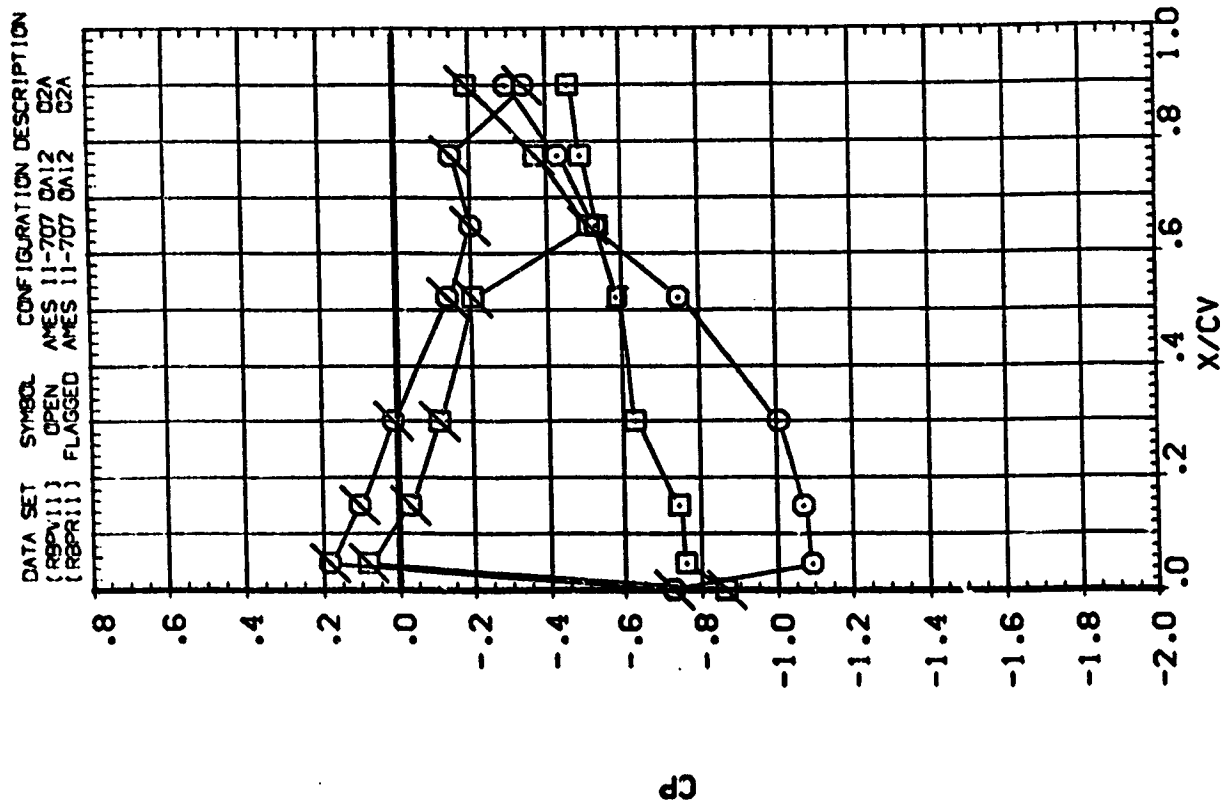


CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 20.000 R0029 -10.000
 .000 R001R .000

SYNCH Z/BV BETA MACH
 .840 .903
 .925

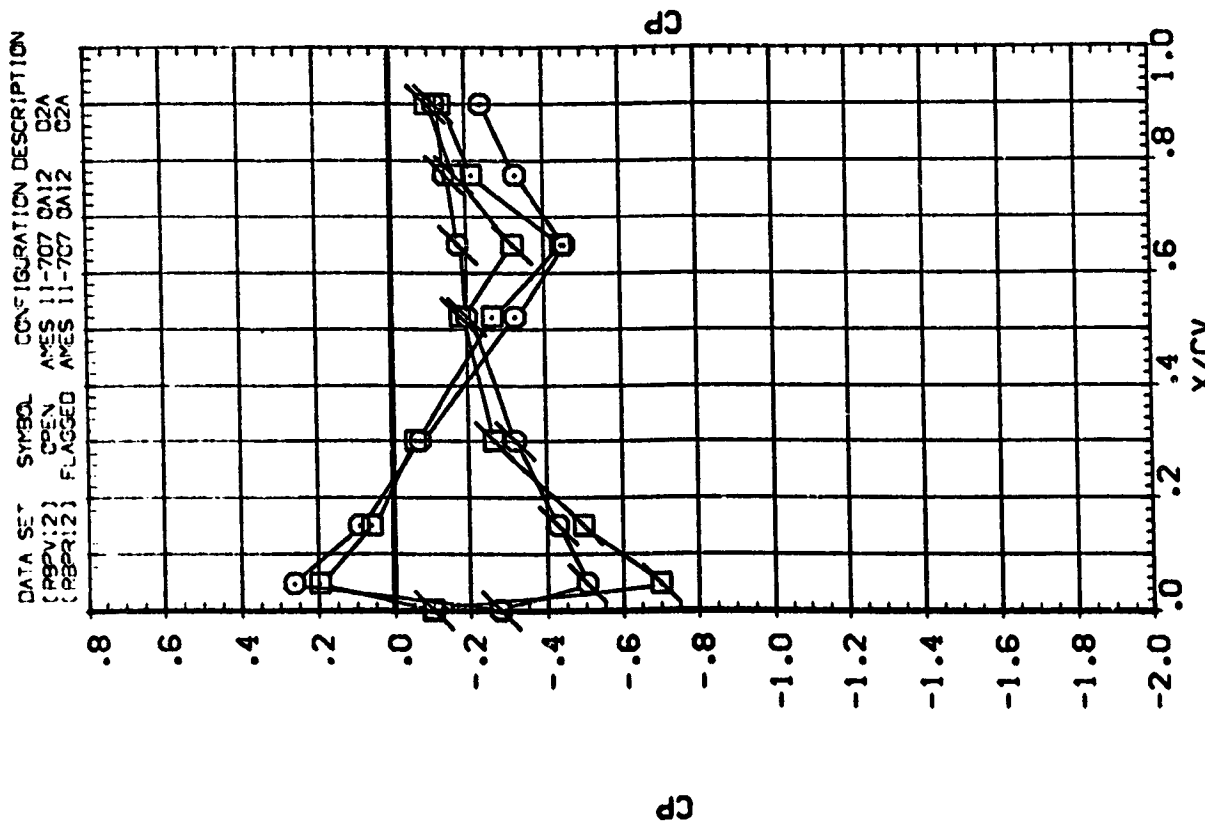
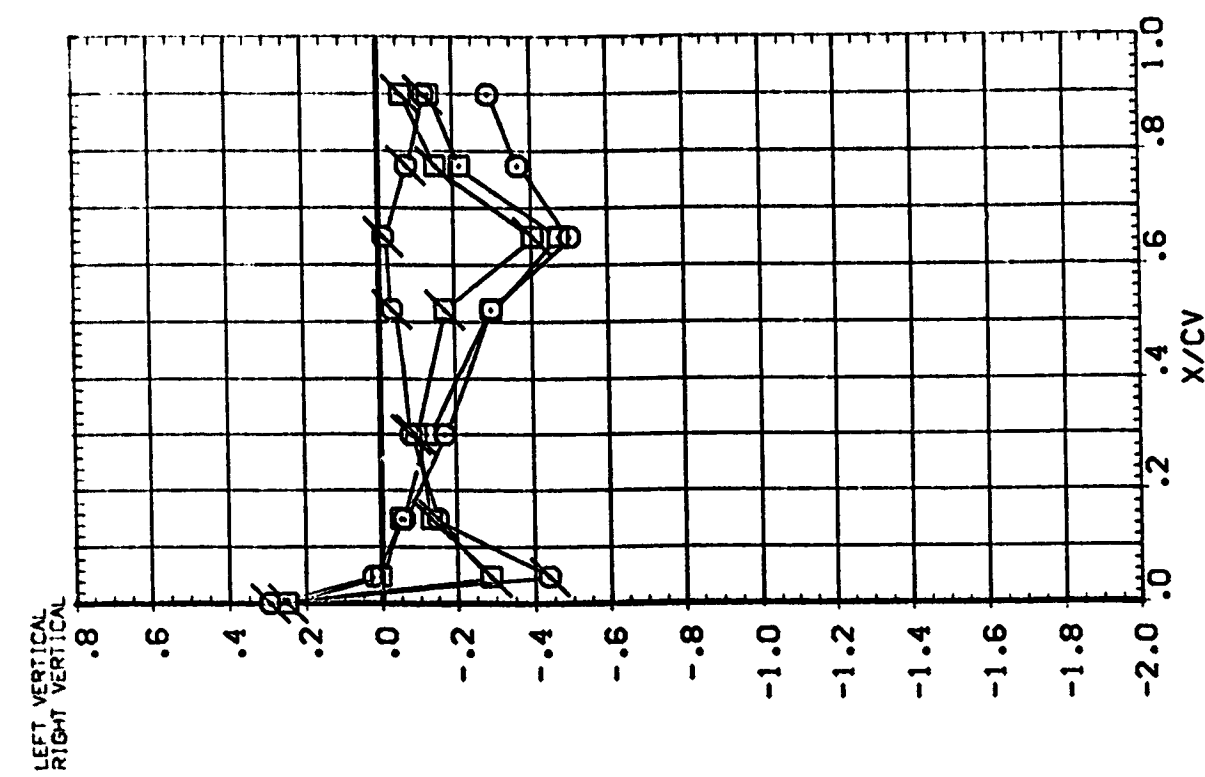
LEFT VERTICAL
 RIGHT VERTICAL



PARAMETRIC VALUES
 .000 RUDER
 .000 RUDER
 -20.000

ALPHA
 ELEVON

SYNCH. Z/BV BETA MAC
 .94C -7.97C .599
 .925 -3.93C



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES



SYMBOL
○ □ ◇

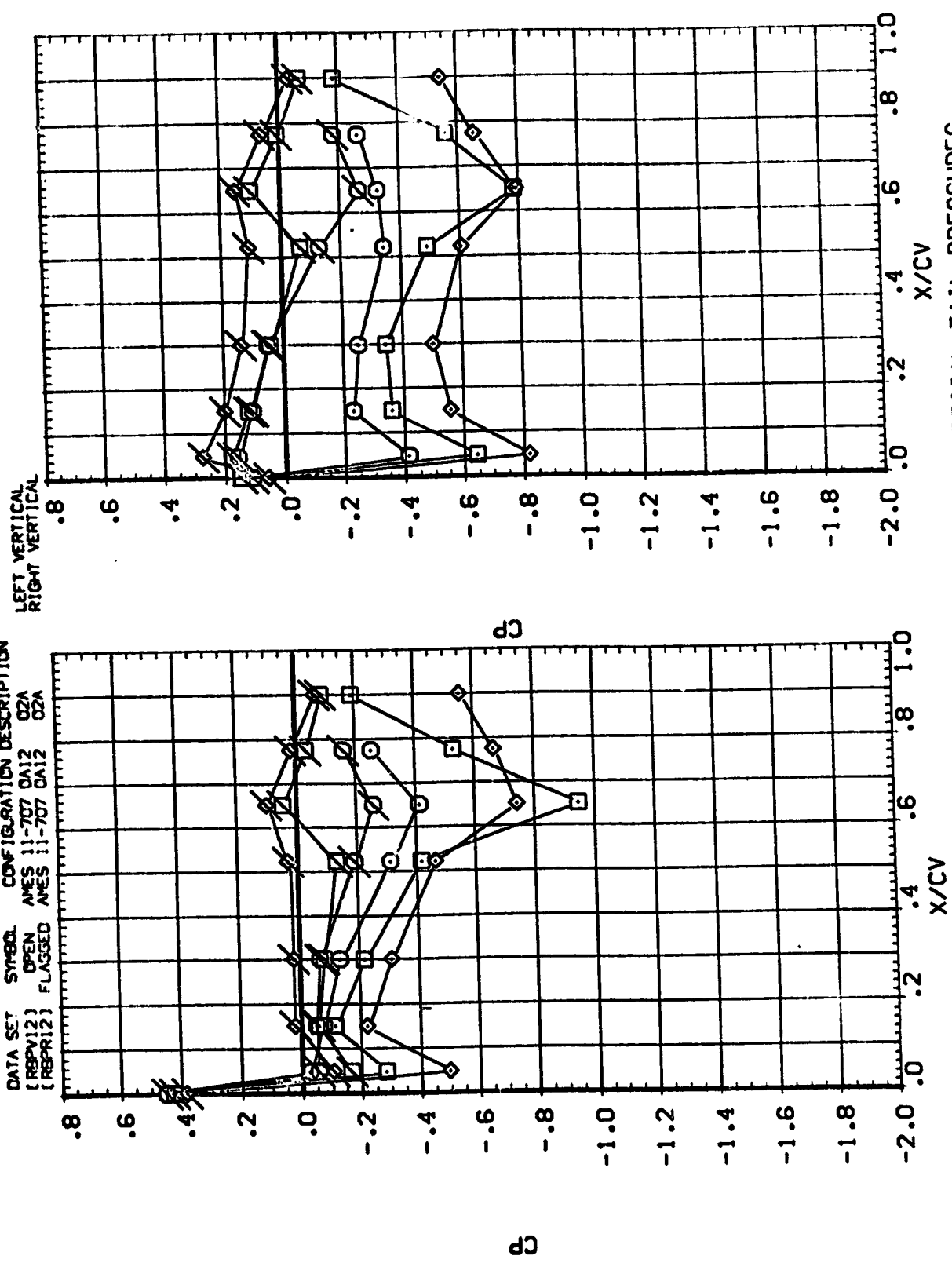
Z/BV
.158
.316
.600

BETA
.100
4.210

MACH
.599

PARAMETRIC VALUES
ALPHA
ELEVON
.000
.000
RUDFLR
-20.000
.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
(RBPV12) OPEN ANES 11-707 OA12 O2A
(RBPV12) FLAGGED ANES 11-707 OA12 O2A



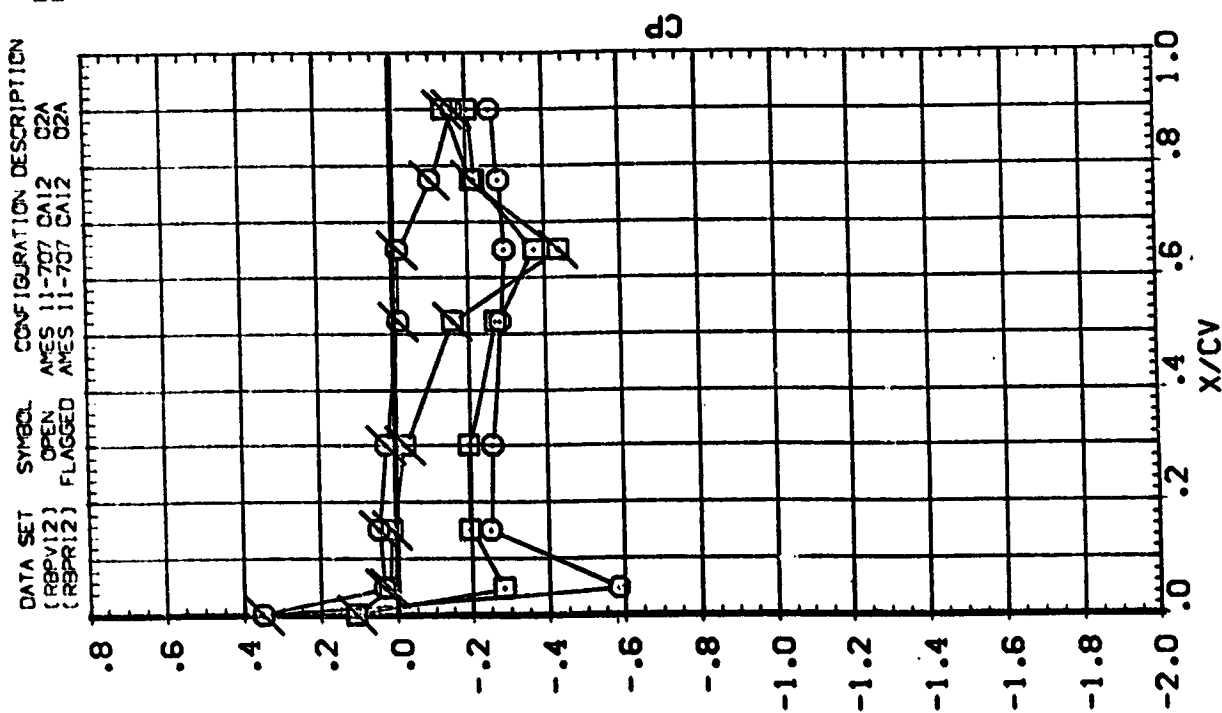
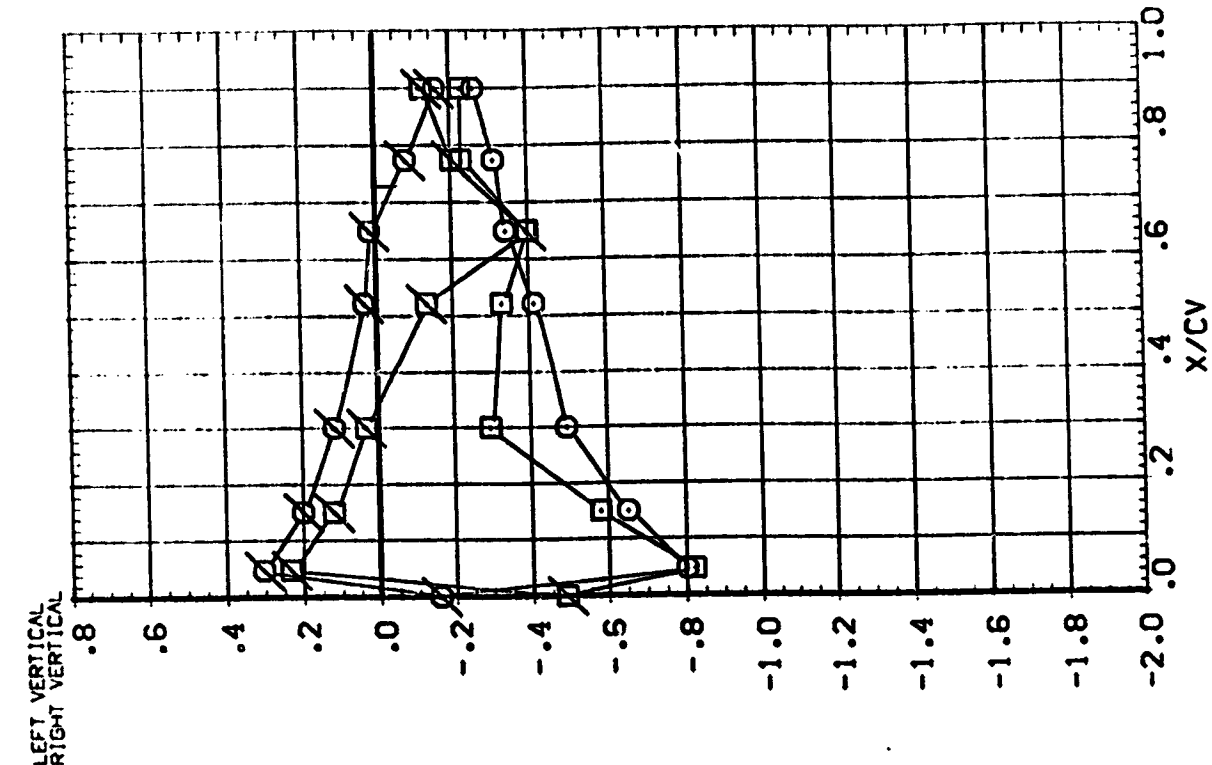
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES

ALPHA
ELEVON

SYMBOL Z/BV BETA MACH
.840 .100 .599
.925 4.210

-20.000
.000
.000
.000



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES



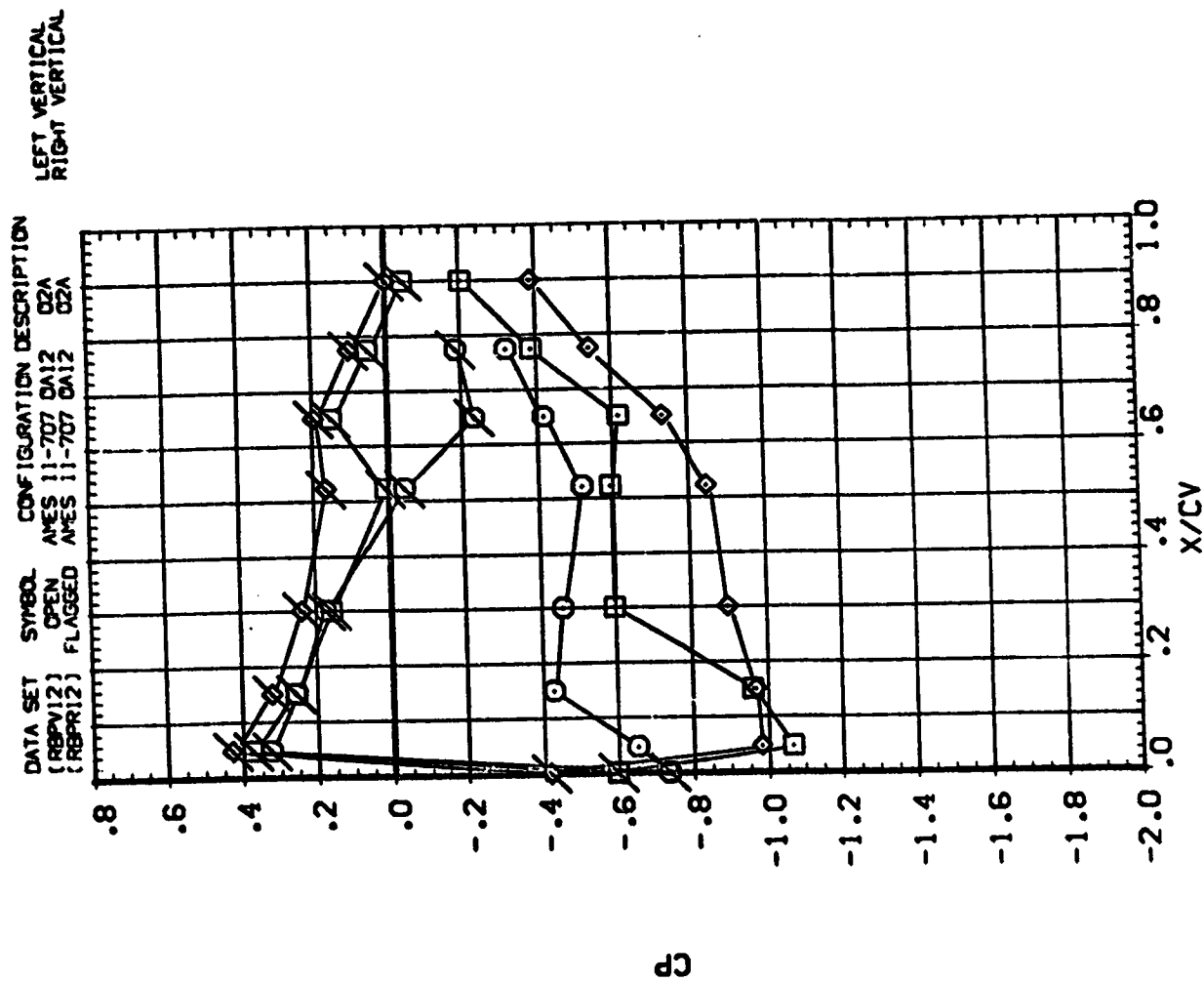
SYMBOL Z/BV
 .158
 .316
 .600

BETA 8.330 MACH .599

PARAMETRIC VALUES
 .000 RUDDER
 .000 RUJFLR

ALPHA
 ELEVON

-70.000
 .000



PARAMETRIC VALUES

ALPHA	RUDDER	-20.000
ELEVON	RUDDER	.000
	RUDDER	.000

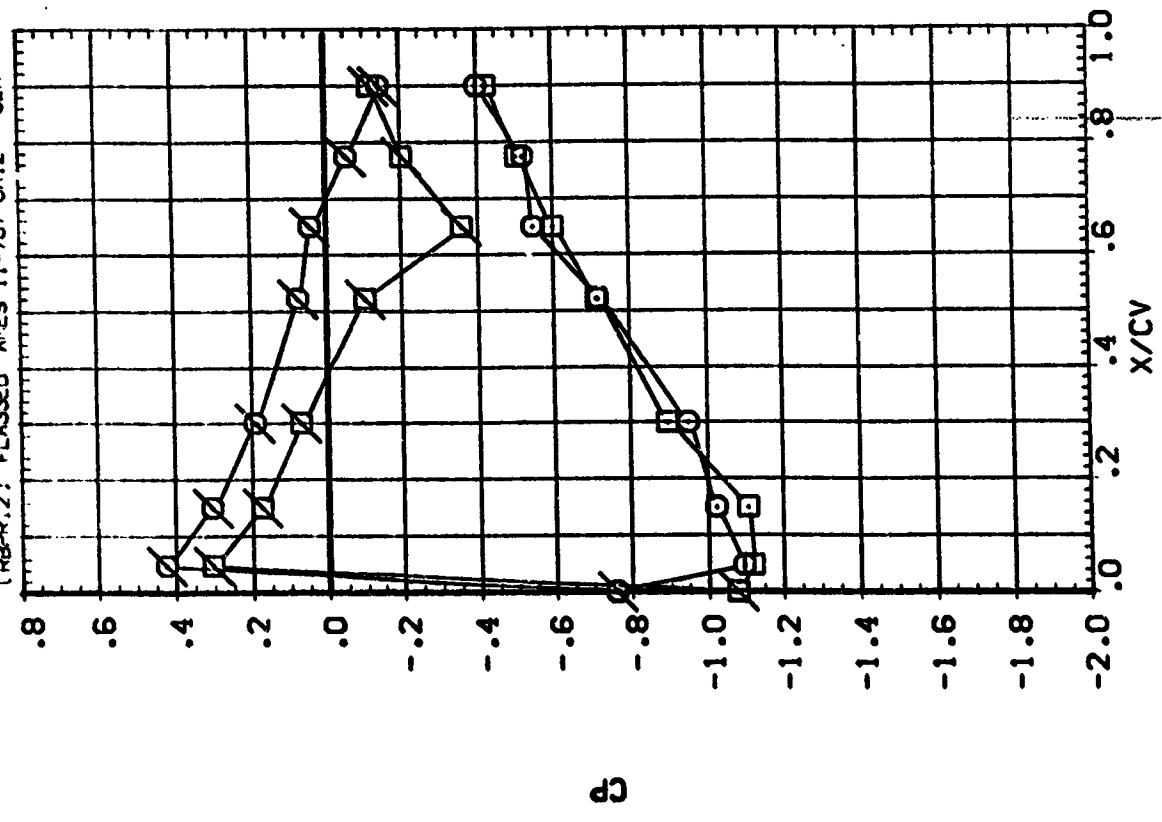
SYMBOL Z/BV BETA MACH

○	.840	8.33C	.599
□	.925		

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RSPV:2)	OPEN	AVES 11-707	QA12	C2A
(RSPR:2)	FLAGED	AVES 11-707	QA12	C2A

LEFT VERTICAL
RIGHT VERTICAL



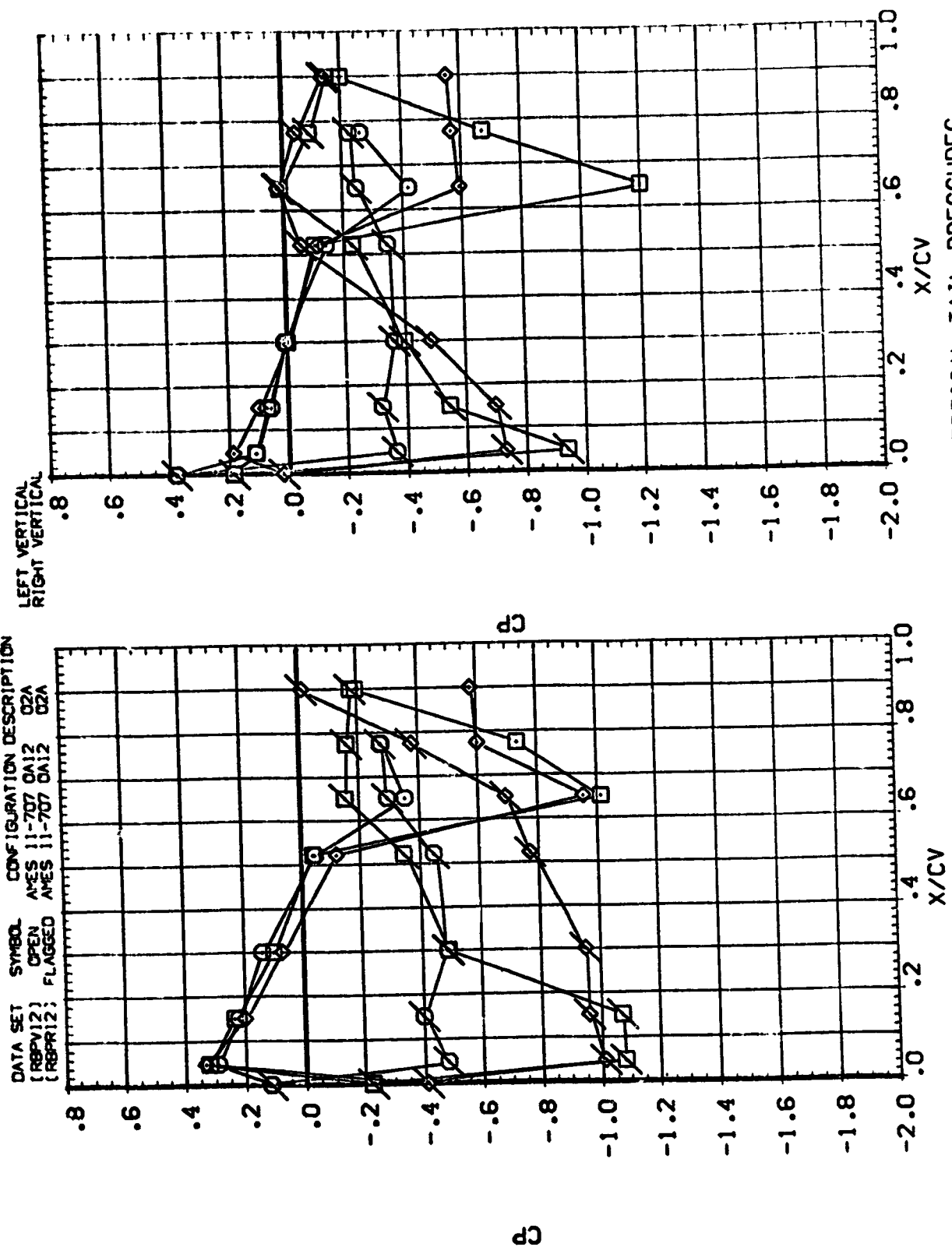


SYMBOL
□
◇

Z/BV .158
.16
.600
BETA -8.080
-4.000
MACH .901

PARAMETRIC VALUES
ALPHA .000
ELEVON .000
RUDDER .000
RUJFLR .000
-20.000
1.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
(RBPV12) OPEN ARES 11-707 OA12 O2A
(RBPV12) FLAGGED ARES 11-707 OA12 O2A



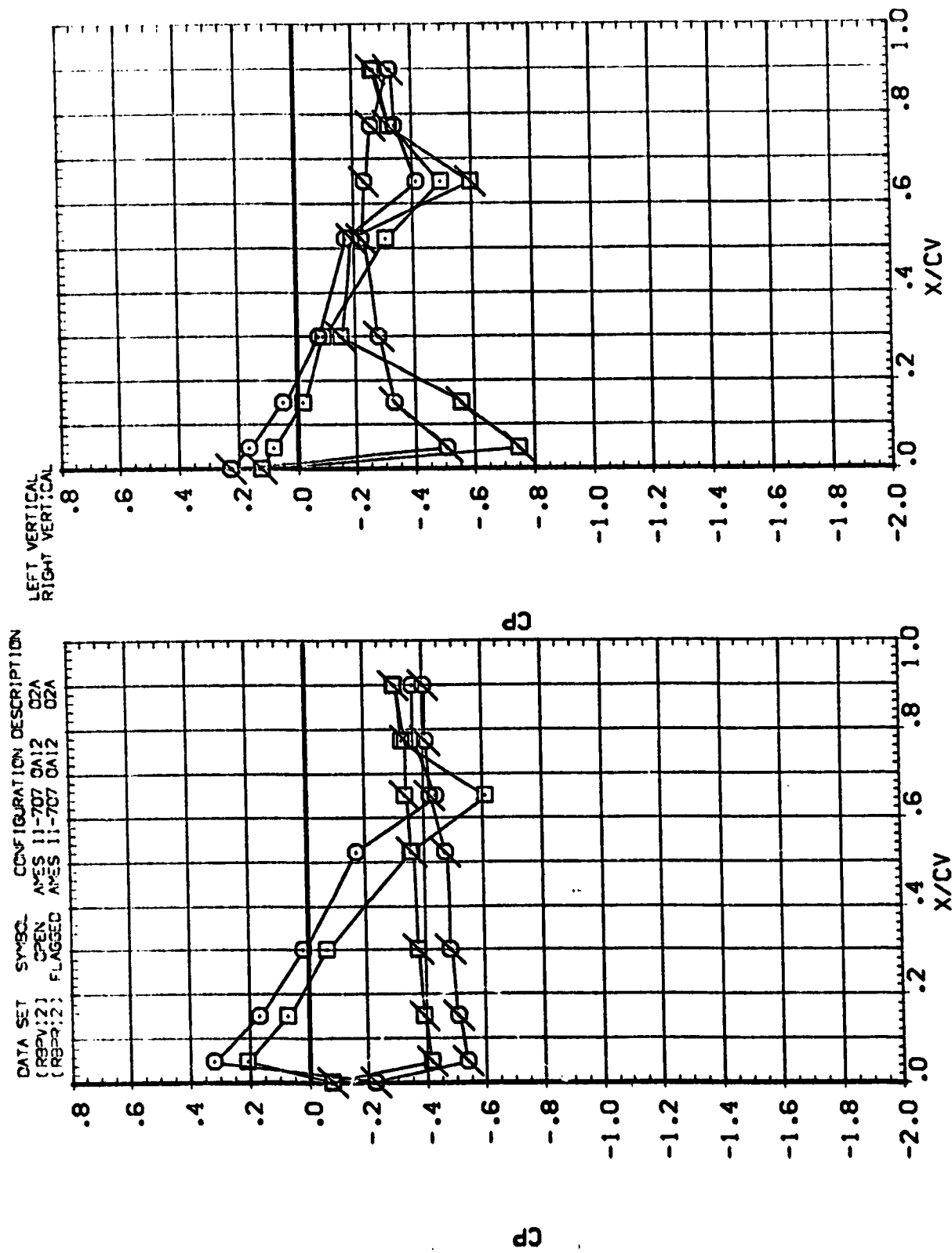
PARAMETRIC VALUES

ALPHA	.000	RUDER	-20.000
ELEVON	.000	RUDFLR	.000

SYMBOL

Z/BV	BETA	MACH
.84C	-8.03C	.901
.925	-4.000	

☐ OPEN
☐ FLAGGED





PARAMETRIC VALUES

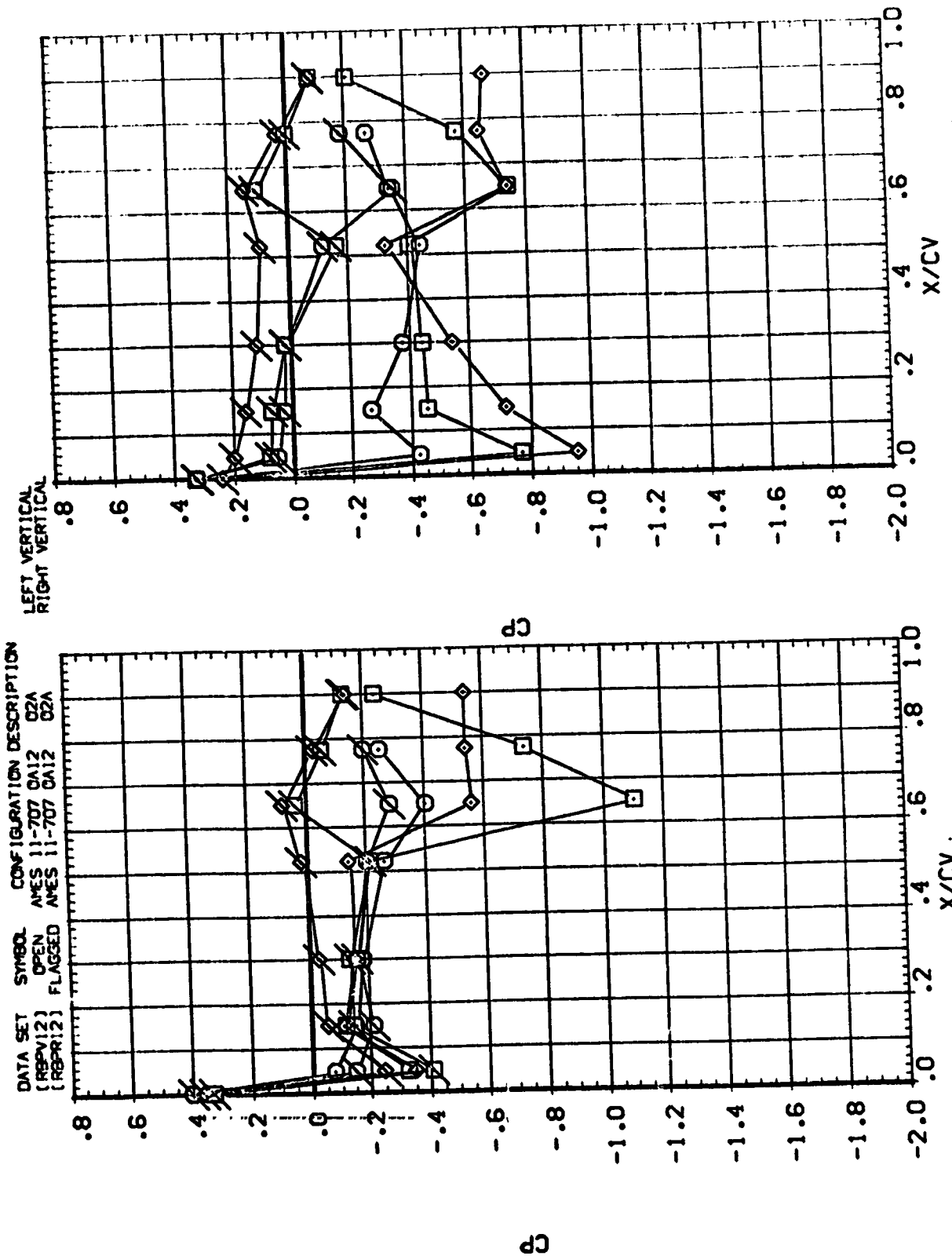
ALPHA	-20.000
ELEVON	.000
RUDER	.000
RUDFLR	.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION

[RBPV12]	OPEN	AVES 11-707	CA12	O2A
[RBPRI2]	FLAGGED	AVES 11-707	CA12	O2A

SYMBOL

Z/BV	BETA	MACH
.158	.100	.901
.316	4.280	
.600		



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES

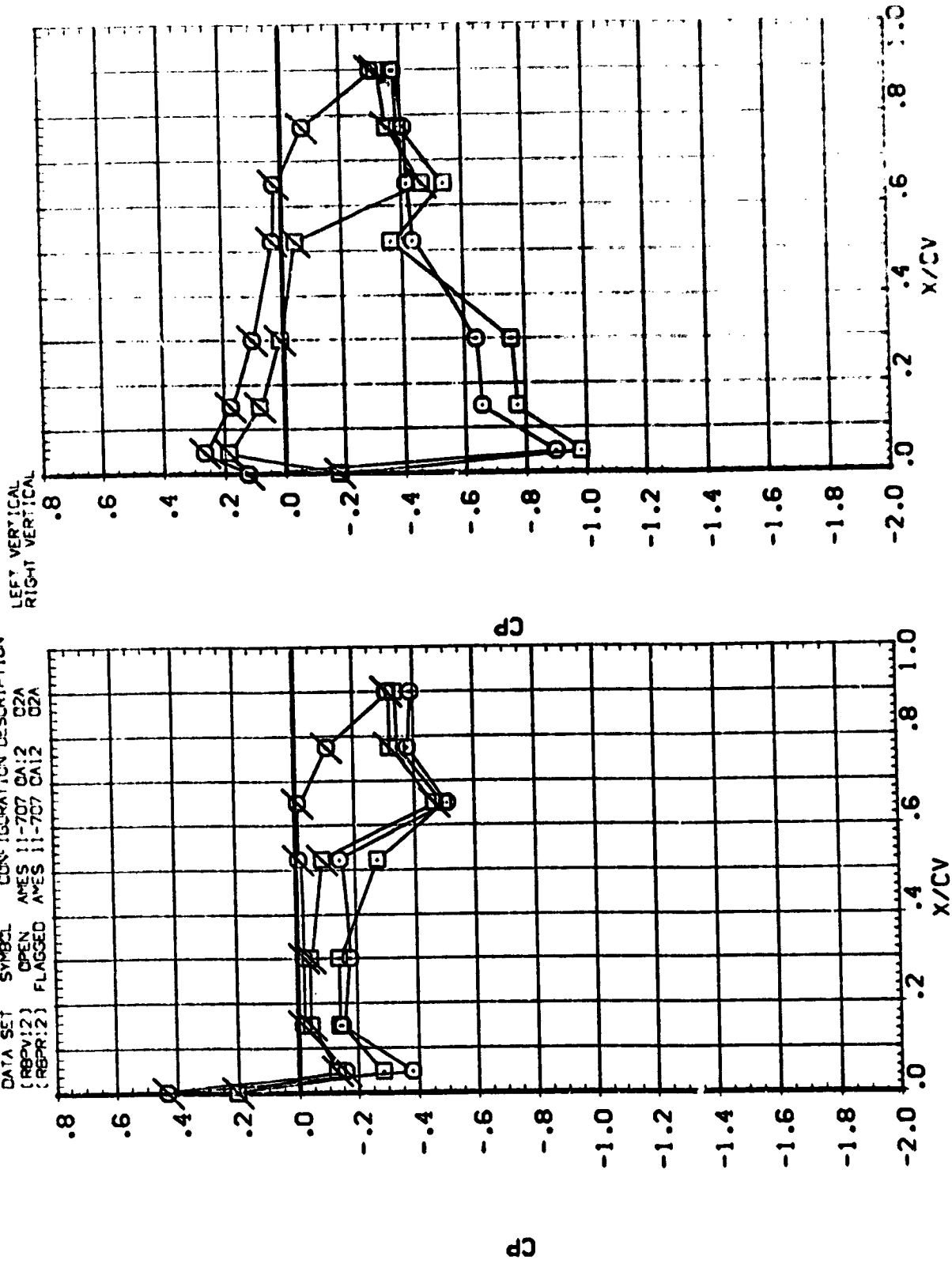
ALPHA	0.000	0.000	0.000
ELEV.	0.000	0.000	0.000

SYMBOL

Z/BV	BETA	MACH
.84C	.100	.901
.925	4.780	

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RBPV:2)	OPEN	AMES 11-707 DA:2	O2A
(RBPV:2)	FLAGGED	AMES 11-707 DA:2	O2A



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES

ALPHA
ELEV

0.000
0.000
0.000

0.000
0.000
0.000

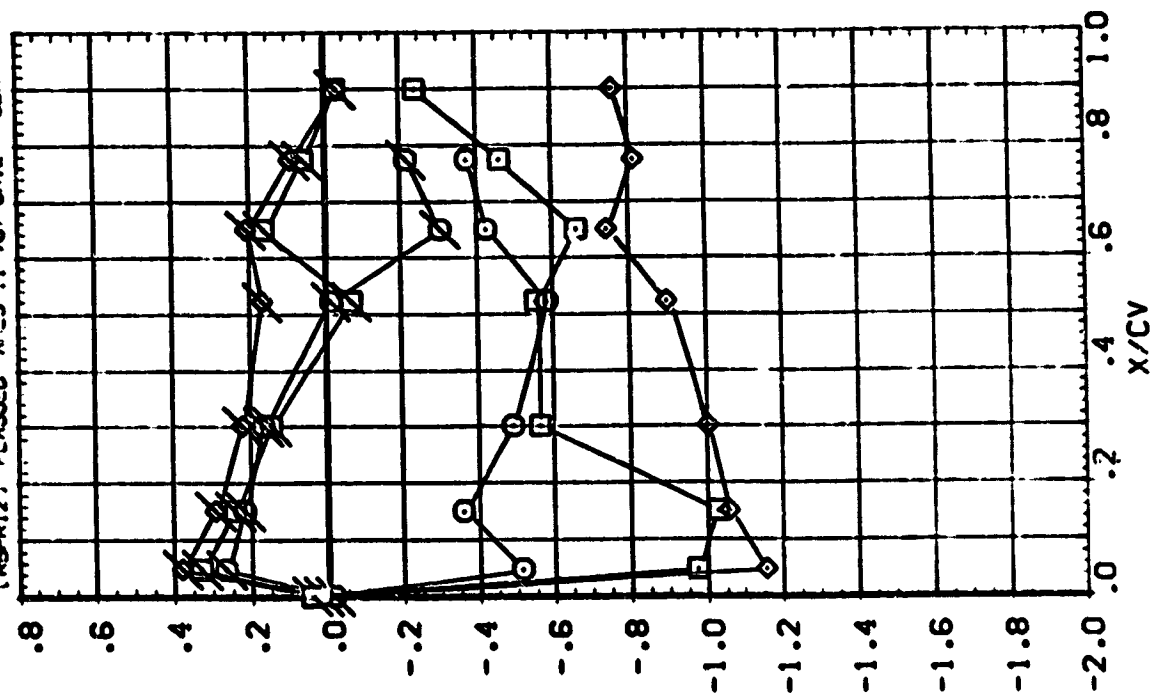
BETA 8.450 MACH .901

Z/BV .158
.316
.600

SYMBOL
□ □ ◇

LEFT VERTICAL
RIGHT VERTICAL

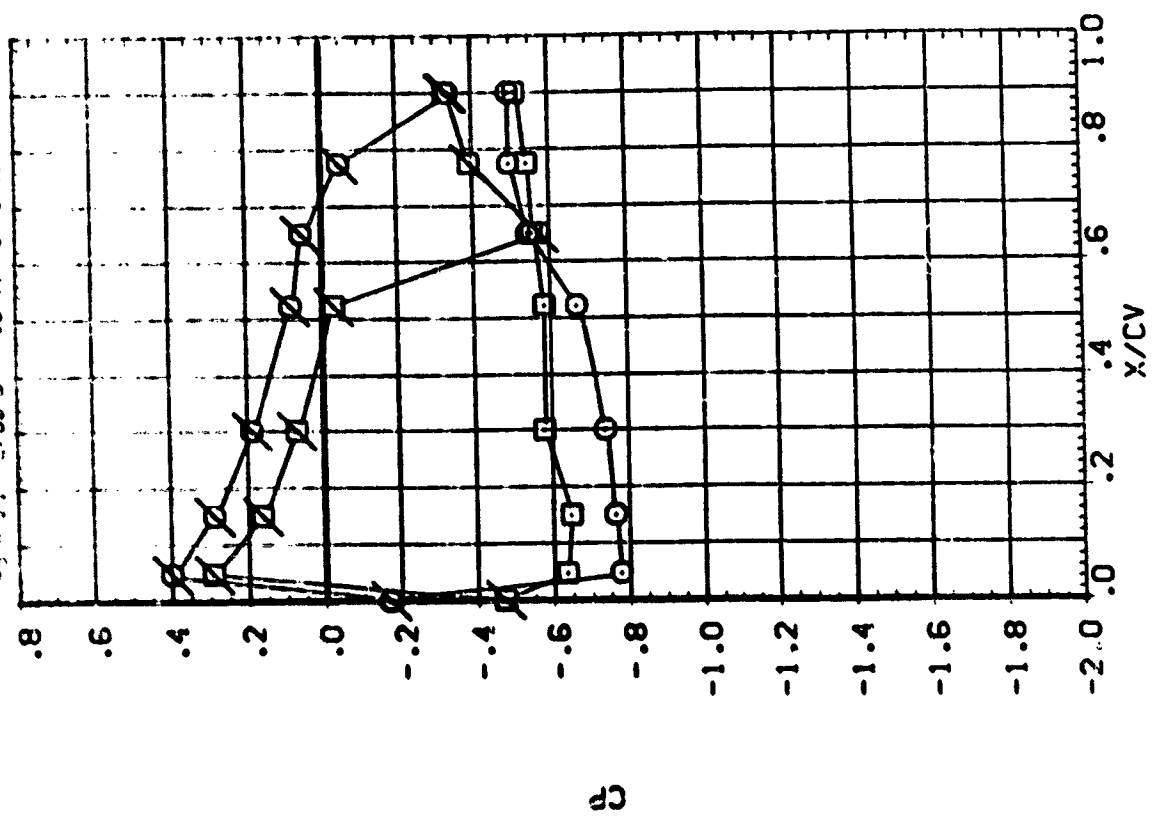
DATA SET SYMBOL CONFIGURATION DESCRIPTION
[RBPV12] OPEN ANES 11-707 CA12 D2A
[RBPV12] FLAGED ANES 11-707 CA12 D2A



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

DATA SET: SW300 CONTOUR DATA DESCRIPTION
 CONTINUED: OPEN ANG 11-207 D12 SEA
 PAGE 21: CLASSIC ANG 11-207 D12 SEA

LEFT VERTICAL
 30° VERTICAL



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

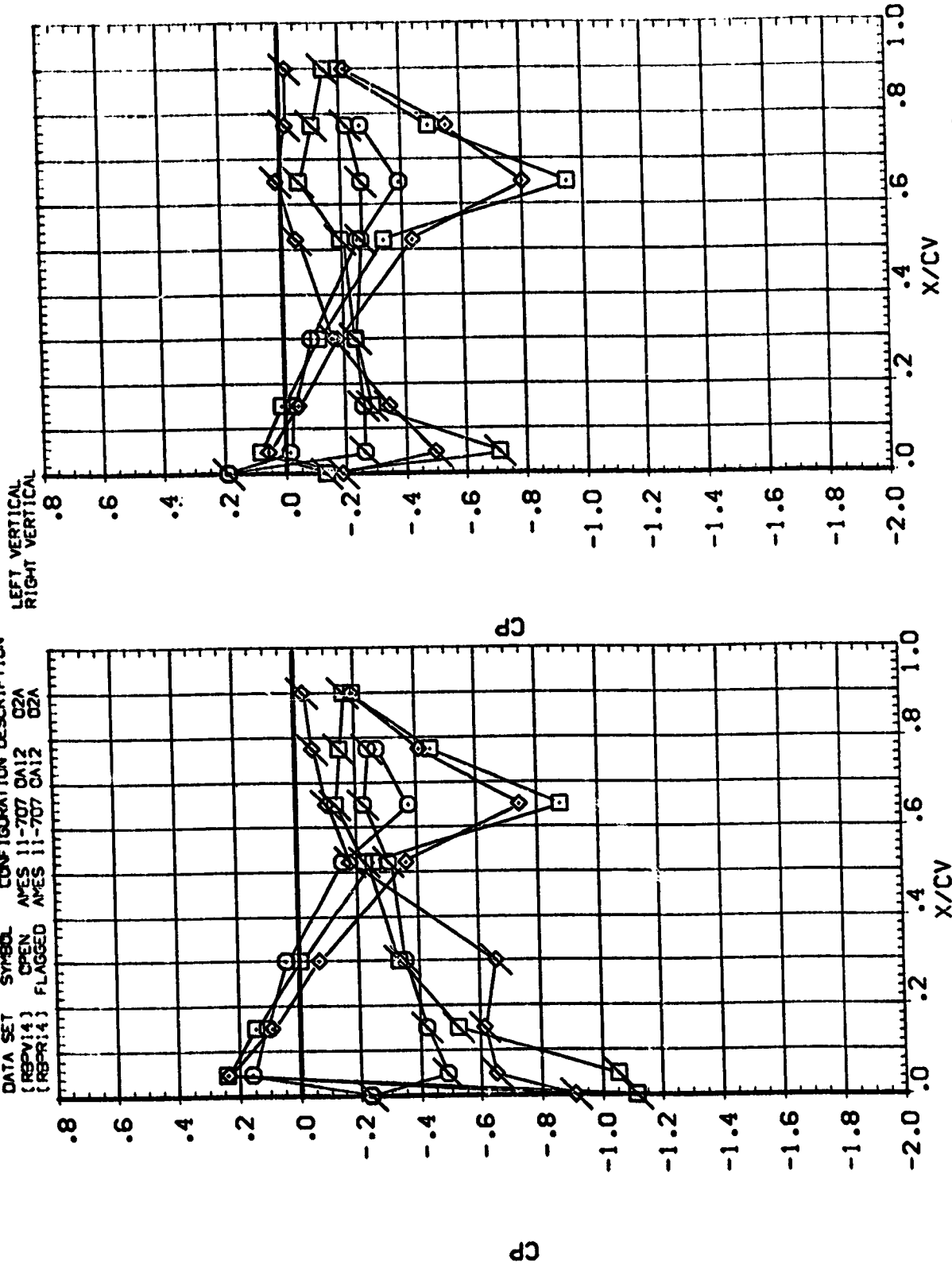


SYMBOL Z/BV
 .158
 .316
 .600

BETA MACH
 -8.060 .599
 -3.960

PARAMETRIC VALUES
 ALPHA 10.000 RUDER -20.000
 ELEVON .000 RUDLR .000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [RSPV14] OPEN AYES 11-707 CA12 O2A
 [RSPR14] FLAGGED AYES 11-707 CA12 O2A



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES

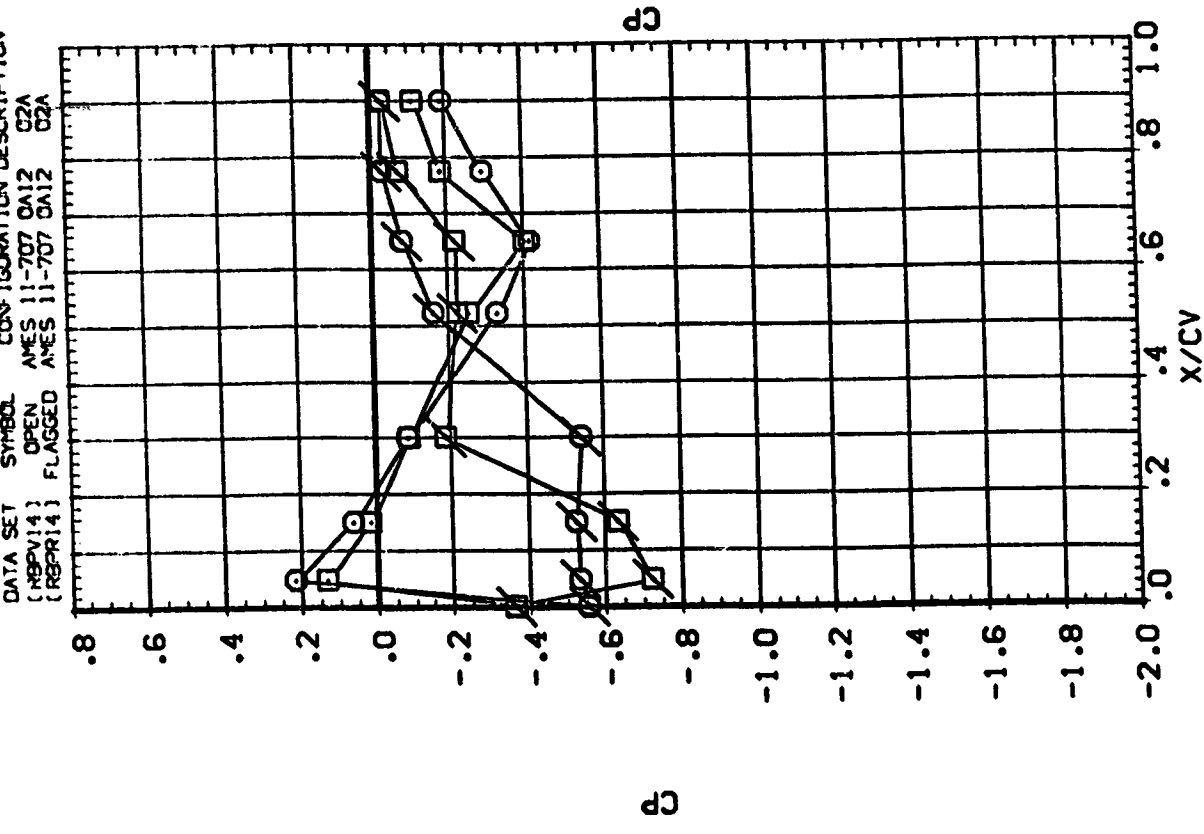
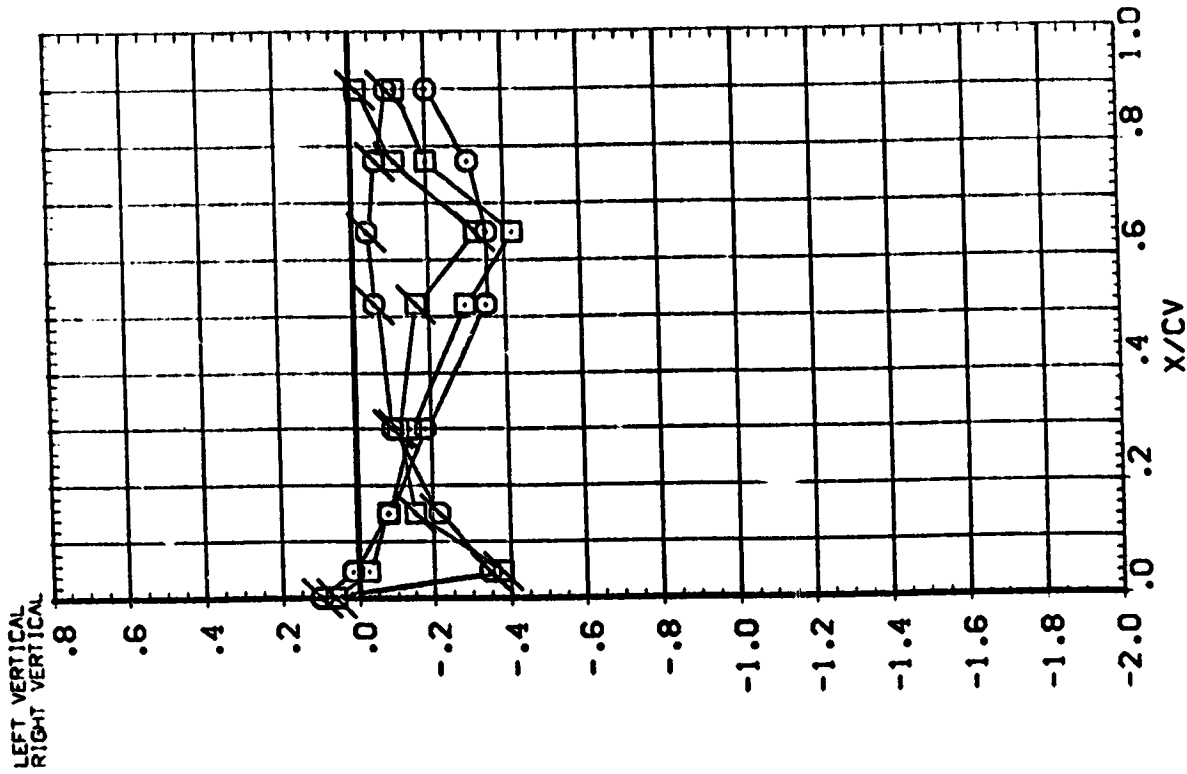
ALPHA	10.000	RUDDER	-20.000
ELEVON	.000	RUDLER	.000

SYMBOL Z/BV BETA MACH

□	.84C	-8.060	.599
○	.925	-3.980	

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(HBPV14)	OPEN	ANES 11-707	OA12	Q2A
(RBPV14)	FLAGGED	ANES 11-707	OA12	Q2A



PARAMETRIC VALUES

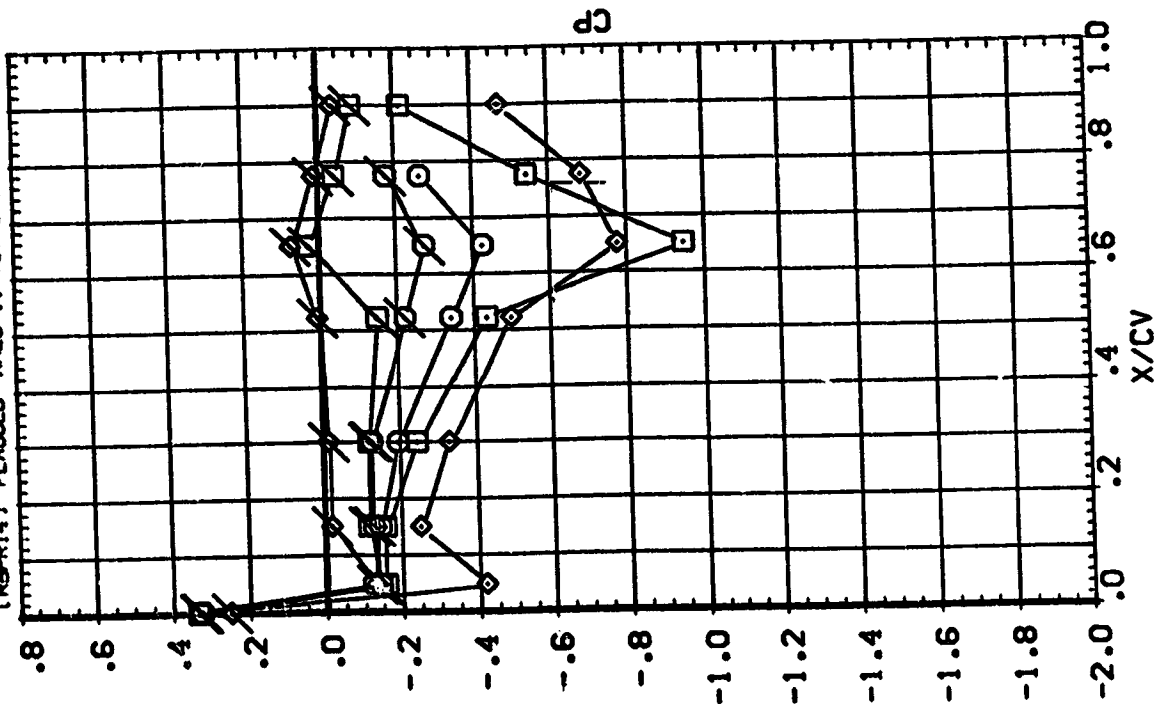
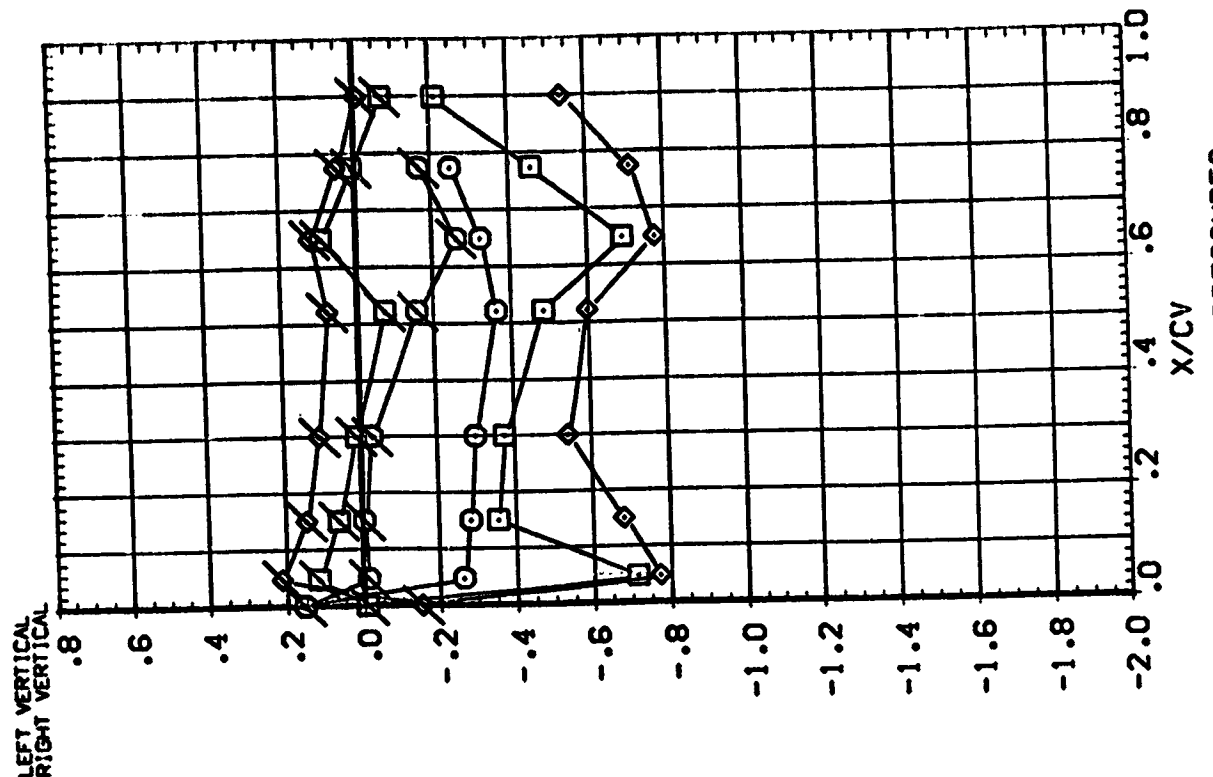
ALPHA	10.000	RUDDER	-20.000
ELEVON	.000	RUDLER	.000

SYMBOL

Z/BN	BETA	MACH
.158	.090	.589
.316	4.170	
.500		

DATA SET SYMBOL CONFIGURATION DESCRIPTION

[RBPV:4]	OPEN	ANES 11-707	DA12	02A
[RBPV:4]	FLAGGED	ANES 11-707	DA12	02A

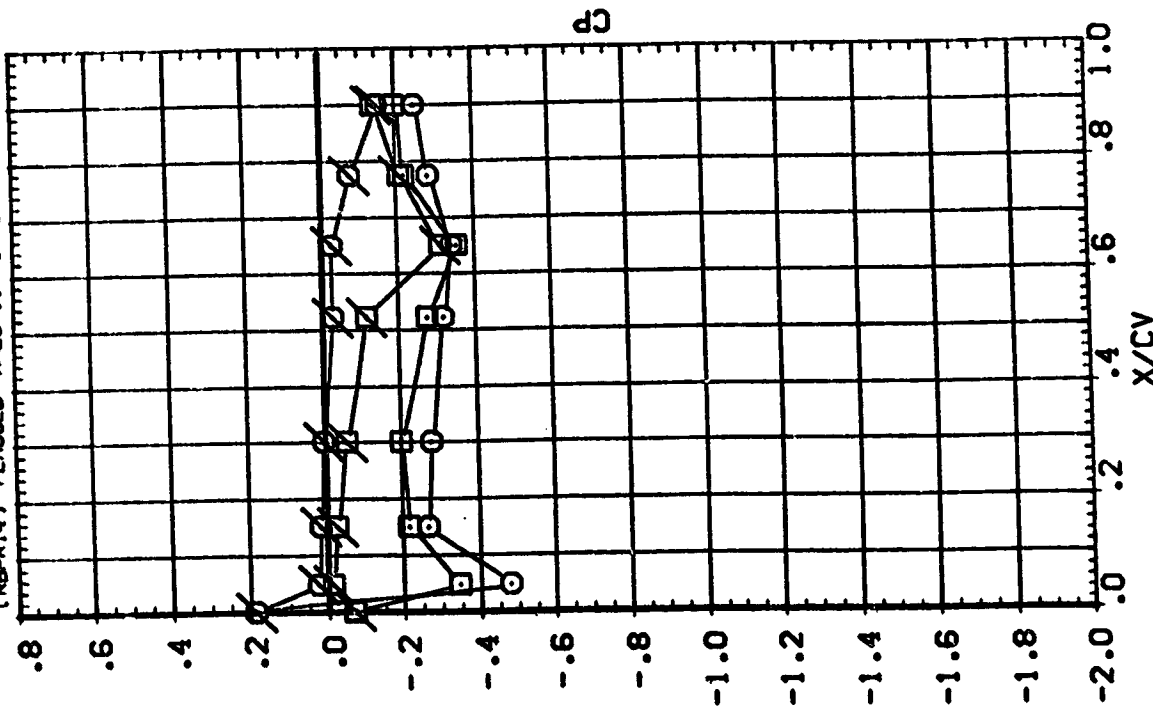
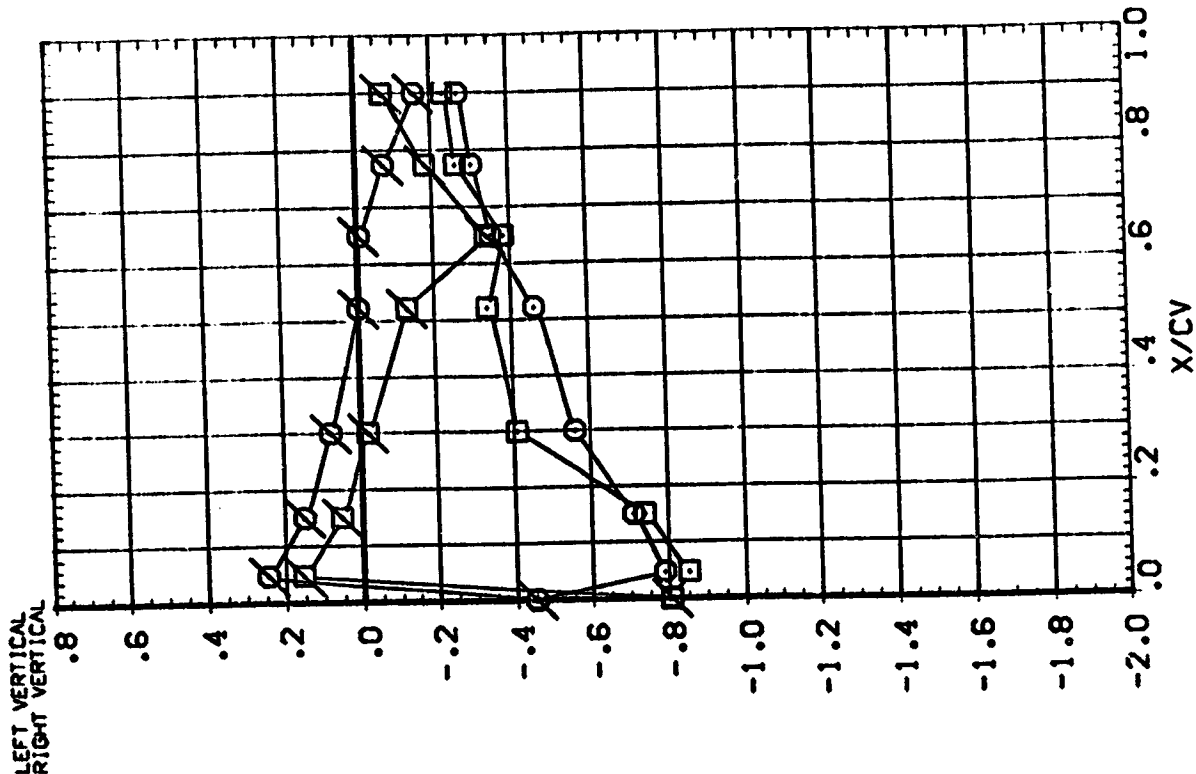


CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 ALPHA 10.000 RUDDER -20.000
 ELEVON .000 RUFLR .000

SYMBOL Z/BV BETA MACH
 .840 .090 .599
 .925 4.170

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RBPV14) OPEN AVES 11-707 GA12 02A
 (RBPV14) FLAGGED AVES 11-707 GA12 02A

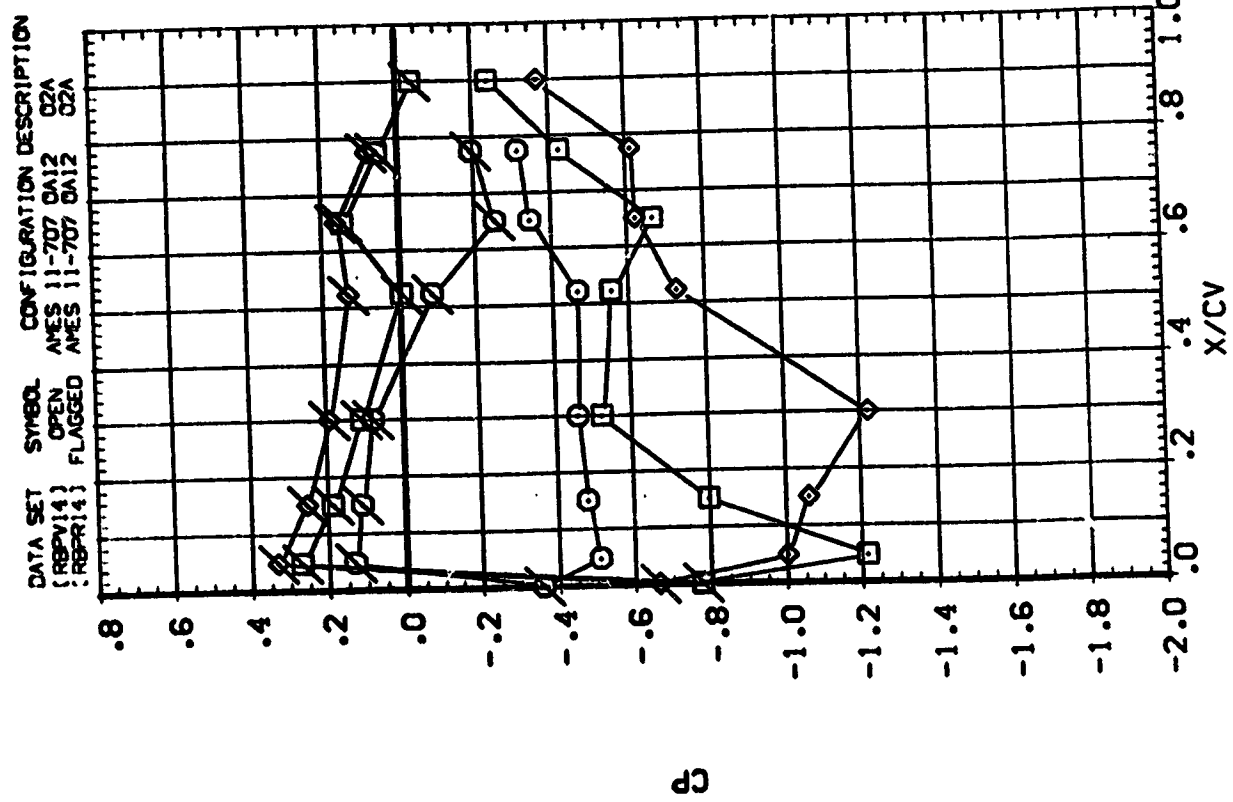


CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 10.000 RCDER -20.000
 .000 RCDLR .000
 ALPHA
 ELEVON

MACH .599
 BETA 8.250
 Z/BV .150
 .315
 .600

LEFT VERTICAL
 RIGHT VERTICAL

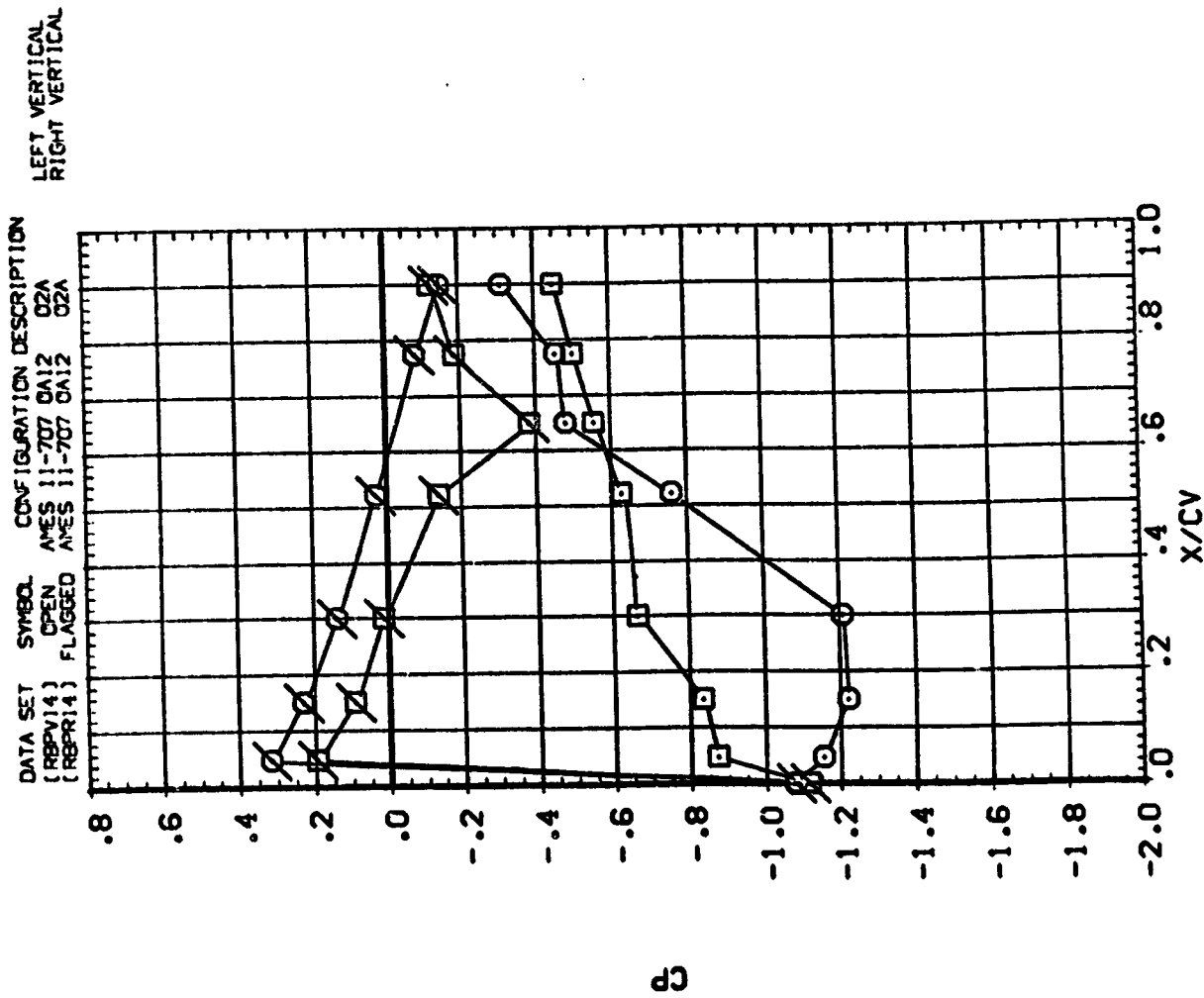


CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 10.000 RUDDER
 .000 RUDFLR
 -20.000
 .000

ALPHA
 ELEVON

SYMBOL Z/BV BETA MACH
 .84C .975
 .8250 .599





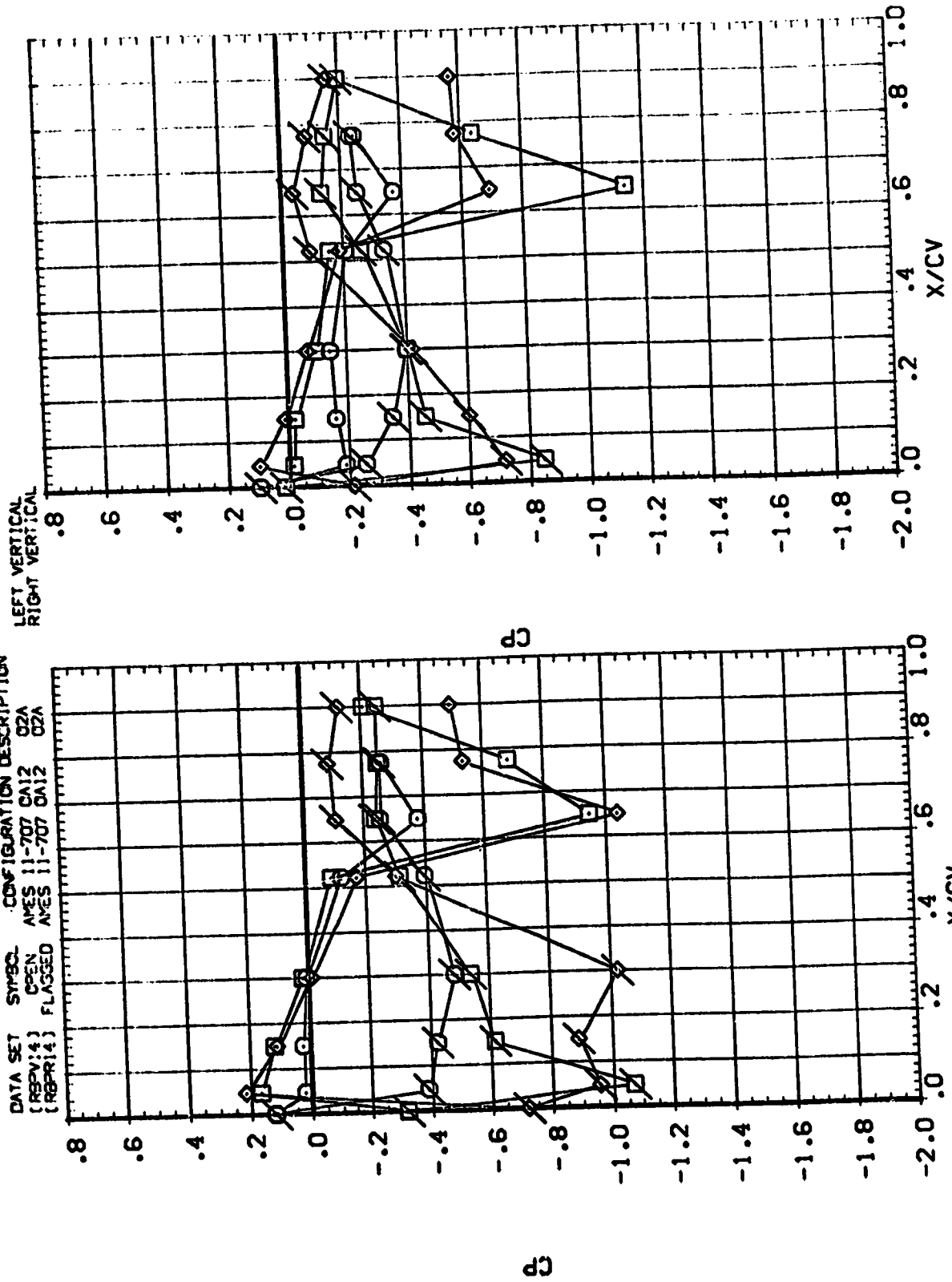
SYMBOL Z/BV
 .158
 .316
 .600

BETA
 -8.150
 -4.040

MACH
 .902

PARAMETRIC VALUES
 ALPHA
 ELEVON
 10.000
 .000
 RUDER
 RUDFLR
 -20.000
 .000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RSPV:4) OPEN AYES 11-707 CA12 OZA
 (RSPR:4) FLAGGED AYES 11-707 CA12 OZA

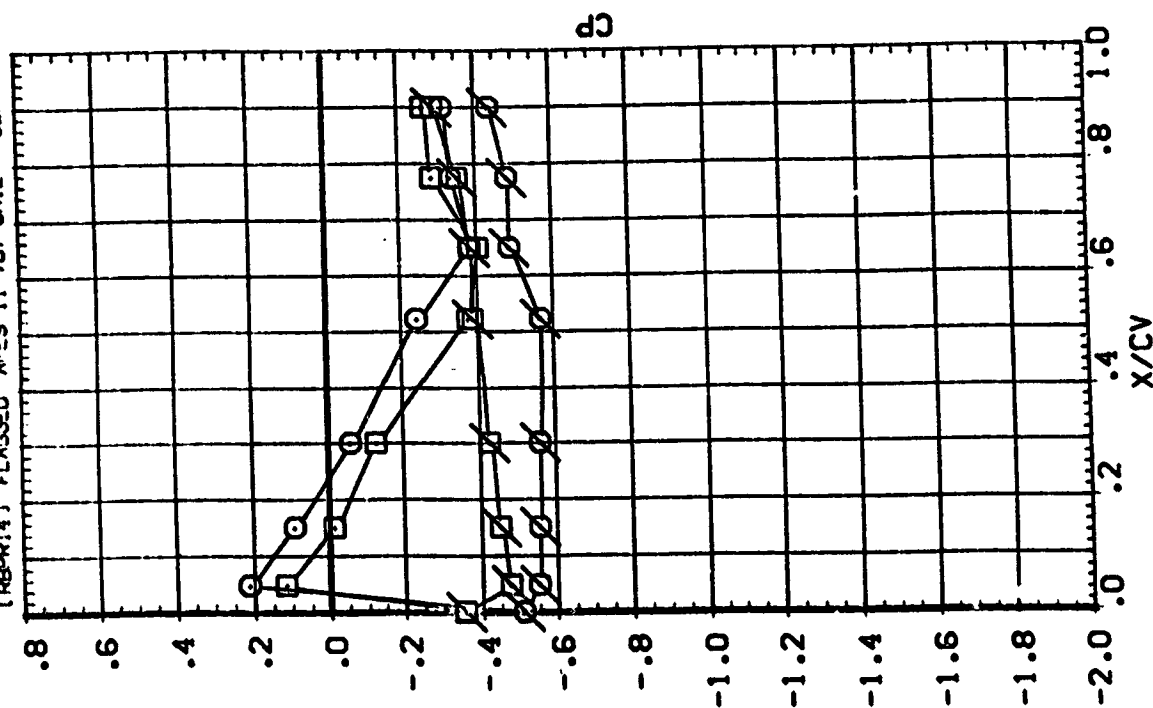
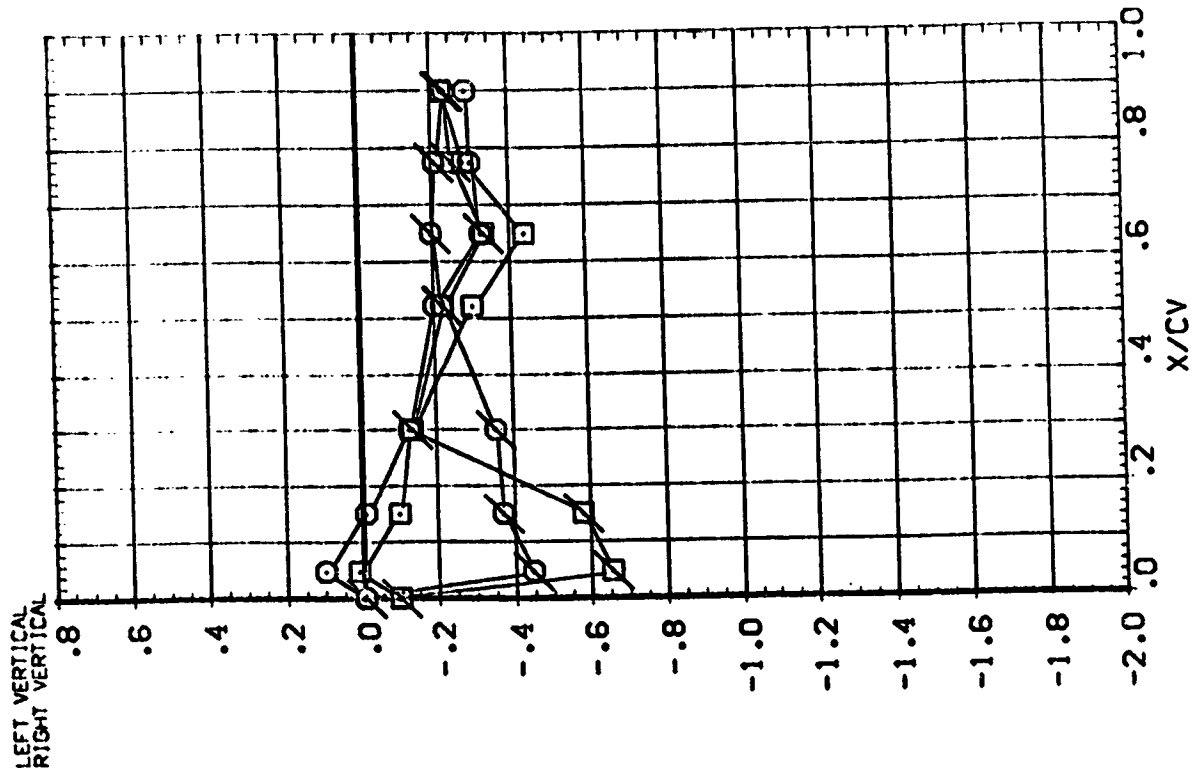


CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 ALPHA 10.000 RUDGER .000
 ELEVON .000 RUDFLR .000

SYMBOL Z/BV BETA MACH
 .840 -8.150 .902
 .925 -4.040

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 {RBPV14} OPEN AMES 11-707 OA12 O2A
 {RBPV14} FLAGGED AMES 11-707 OA12 O2A



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

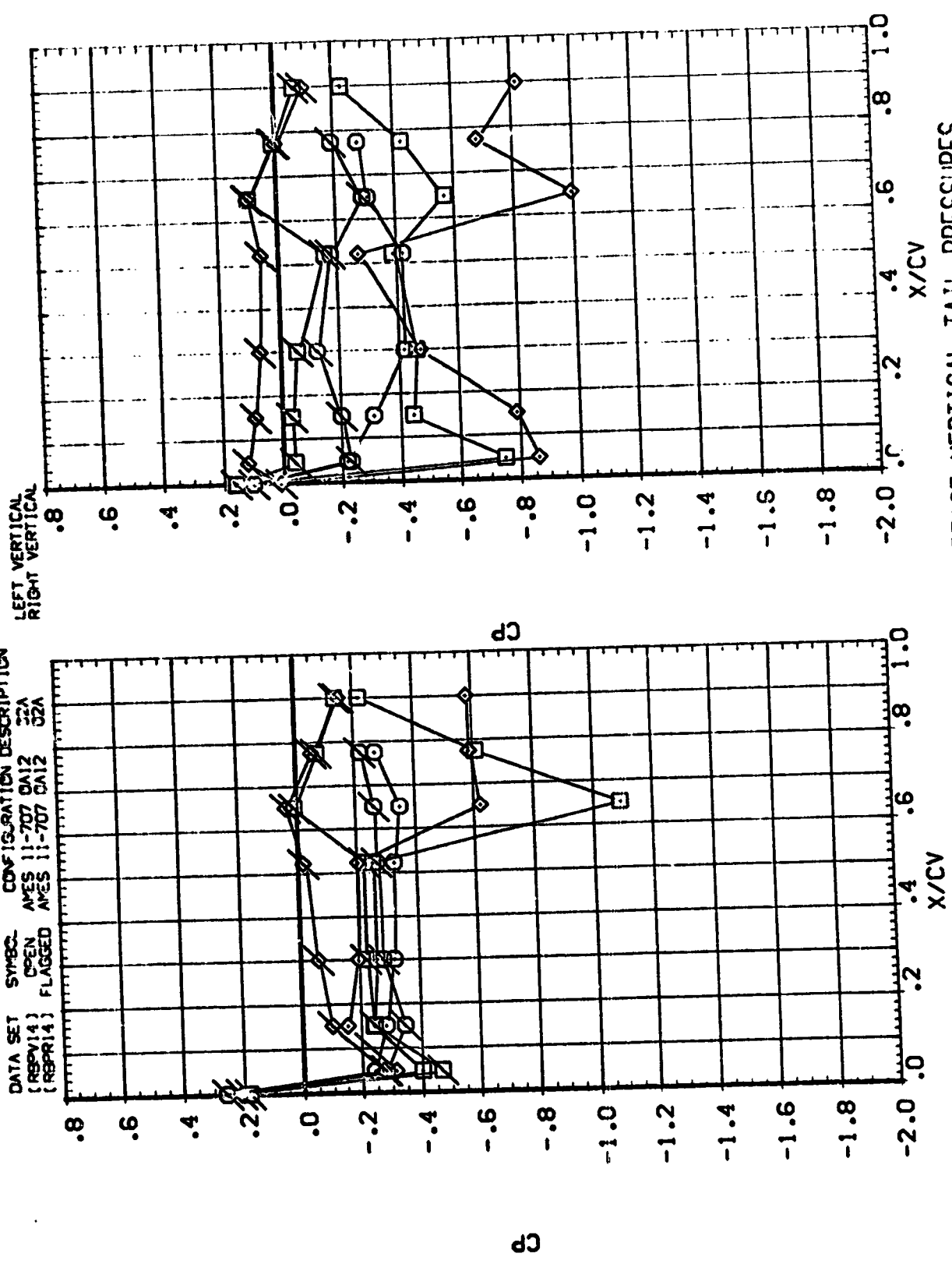


SYMBOL Z/BV
□ .158
○ .316
◇ .600

BETA MACH
.090 .902
4.210

PARAMETRIC VALUES
ALPHA 10.000 RUDDER -20.000
ELEVON .000 RUFFLR .000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
(RBPV14) OPEN APES 11-707 DA12 32A
(RBPV14) FLAGGED APES 11-707 DA12 32A



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES



SYMBOL ☐ ☐

Z/BV .84C
.925

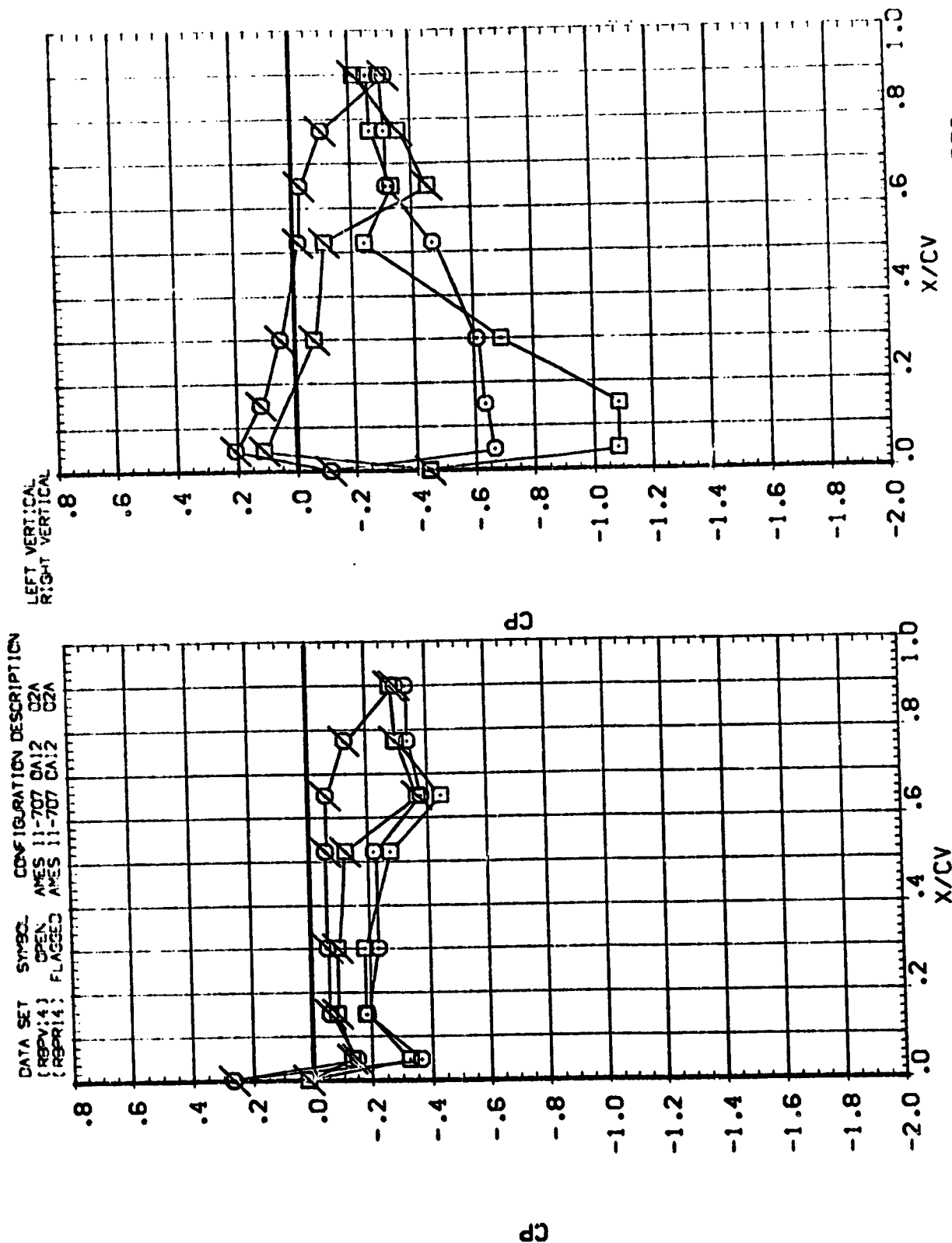
BETA .09C
4.21C

MACH .902

ALPHA ELEVON
10.000 .000

PARAMETRIC VALUES
RUDDER -20.000
RUFLER .000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
(RBPV:4) OPEN AMES 11-707 DA12 02A
(RBPV:4) FLAGGED AMES 11-707 CA12 02A



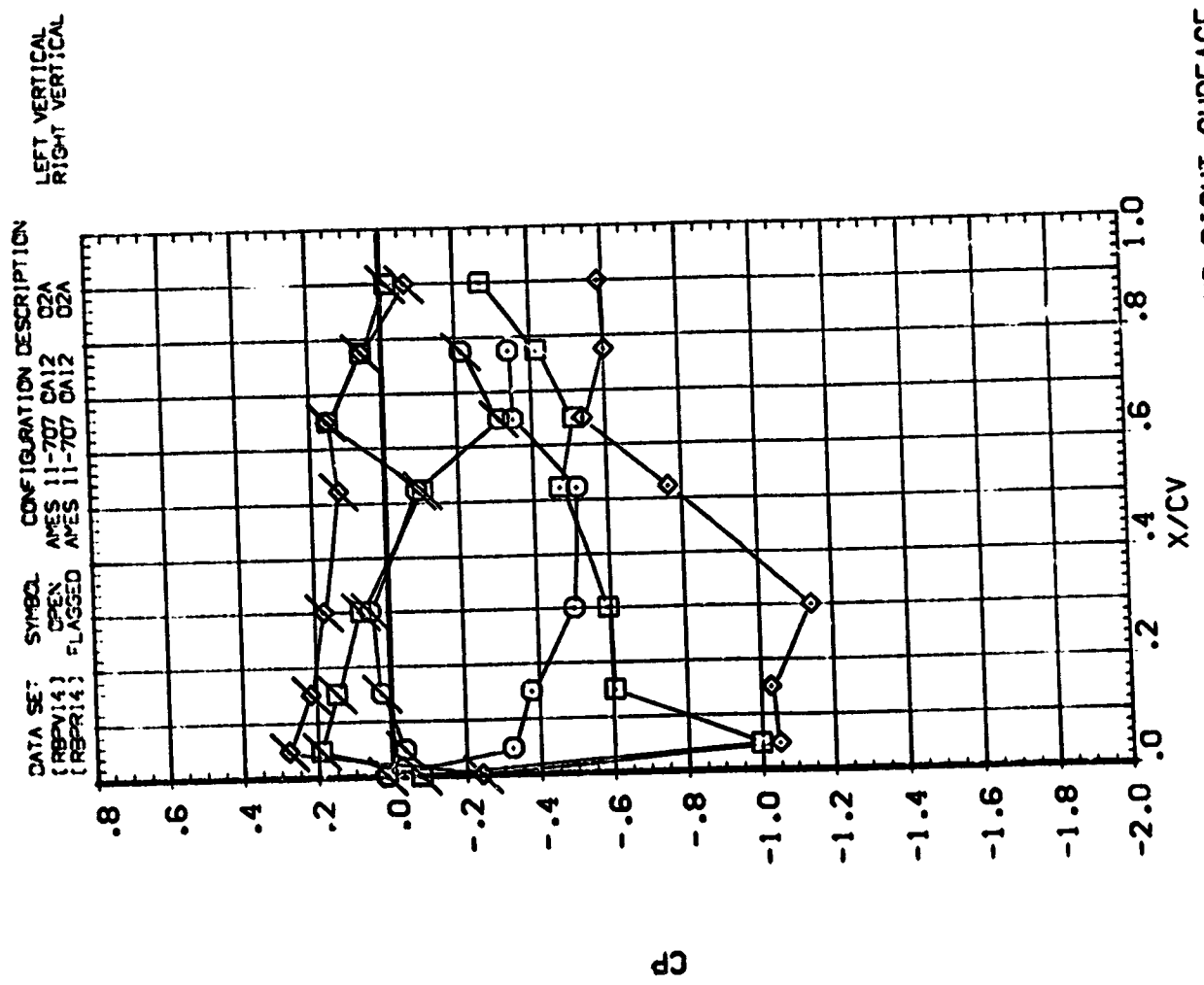
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES



SYMBOL Z/BV
□ .158
◇ .316
◇ .600

BETA 8.350 MACH .902

PARAMETRIC VALUES
ALPHA 10.000 RUMPER -20.000
ELEVON .000 RUMPER .000



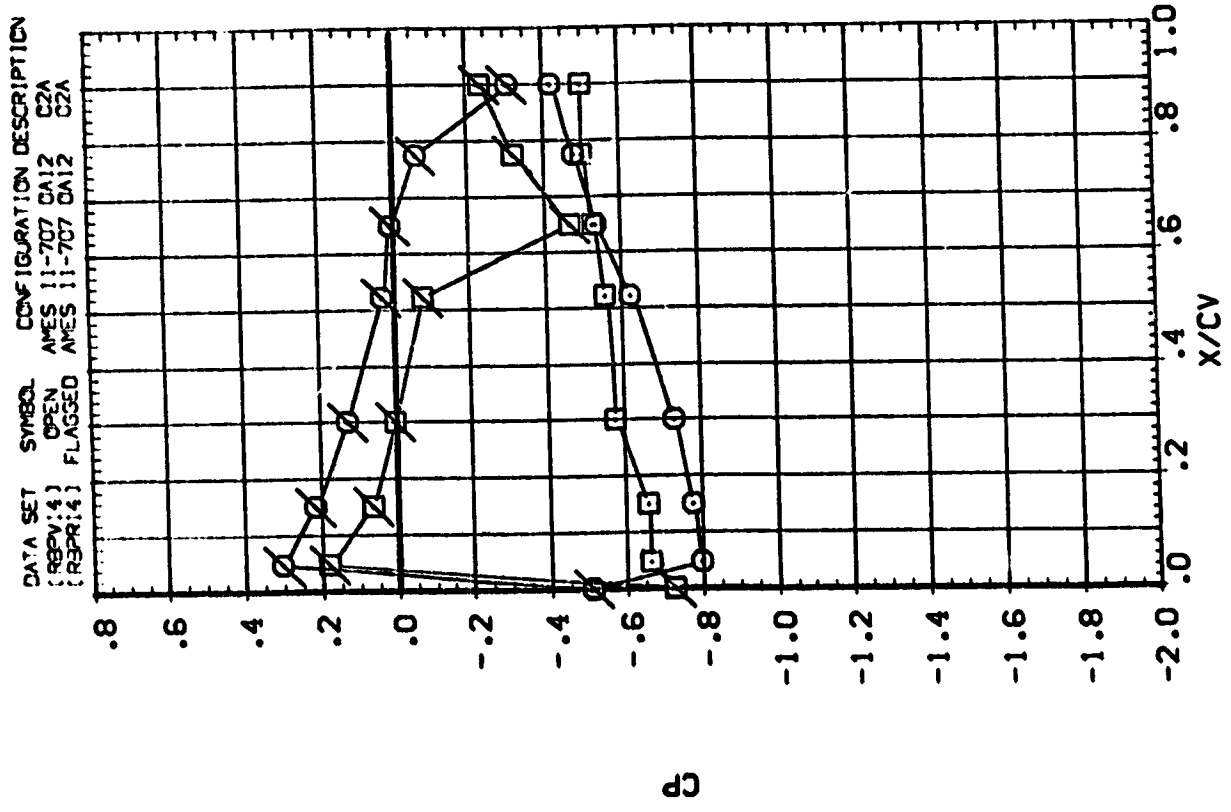
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETER VALUES
 ALPHA 10.000
 ELEVON 1.000
 RUDER 2.000
 RUDDER 2.000

ALPHA
 ELEVON

SYMBOL Z/BV BETA MACH
 .842 .902
 .925

LEFT VERTICAL
 RIGHT VERTICAL



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

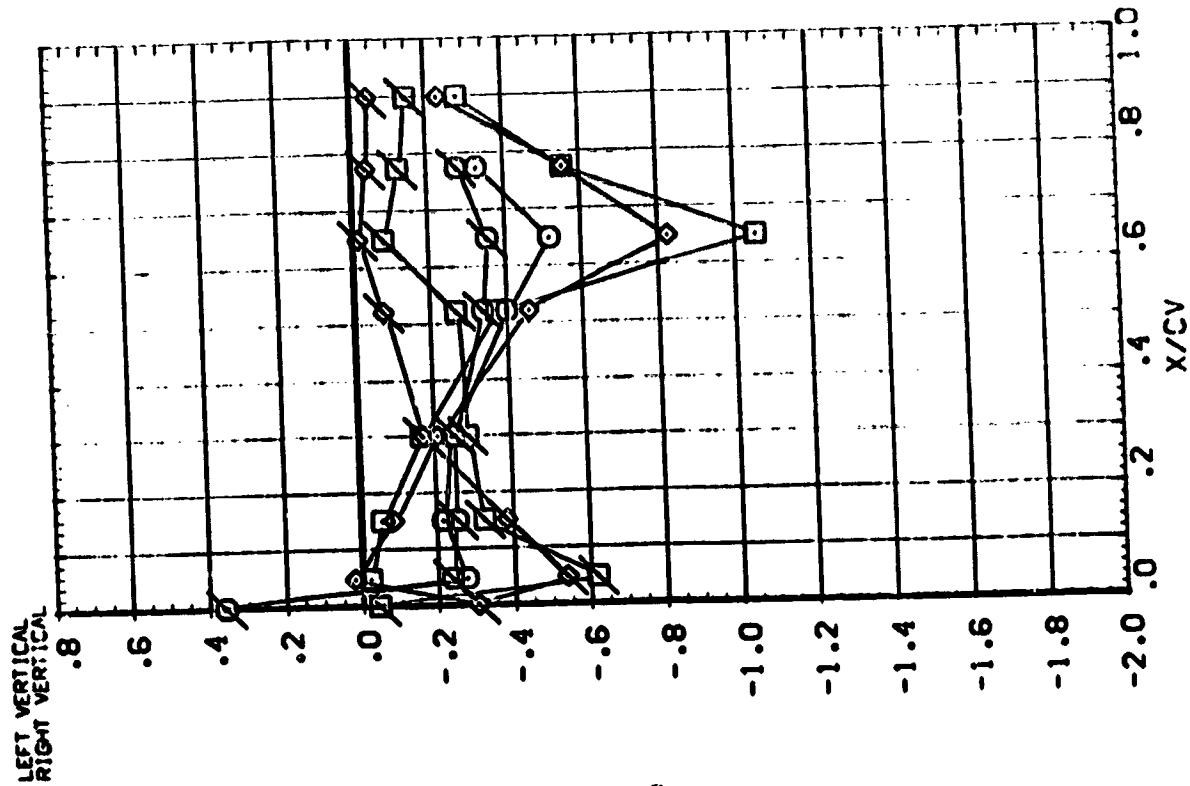
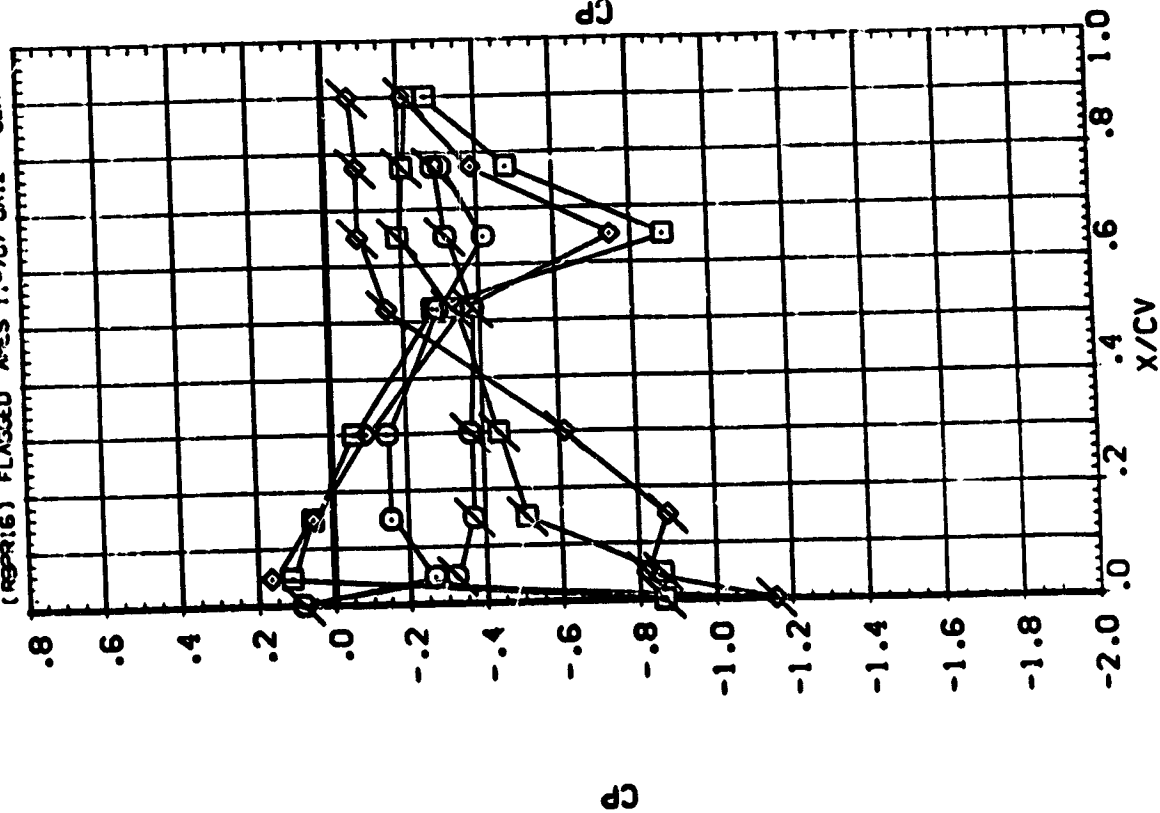


SYMBOL Z/BV
 ○ .150
 □ .316
 ◇ .600

BETA MACH
 -7.990 .589
 -3.950

PARAMETRIC VALUES
 ALPHA ZC.000 RUDER -20.000
 ELEVON .000 RUDFLR .000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REPRI6) OPEN APES 11-707 DA12 C2A
 (REPRI6) FLAGGED APES 11-707 DA12 C2A



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES



SYMBOL Z/B: .94C .92S

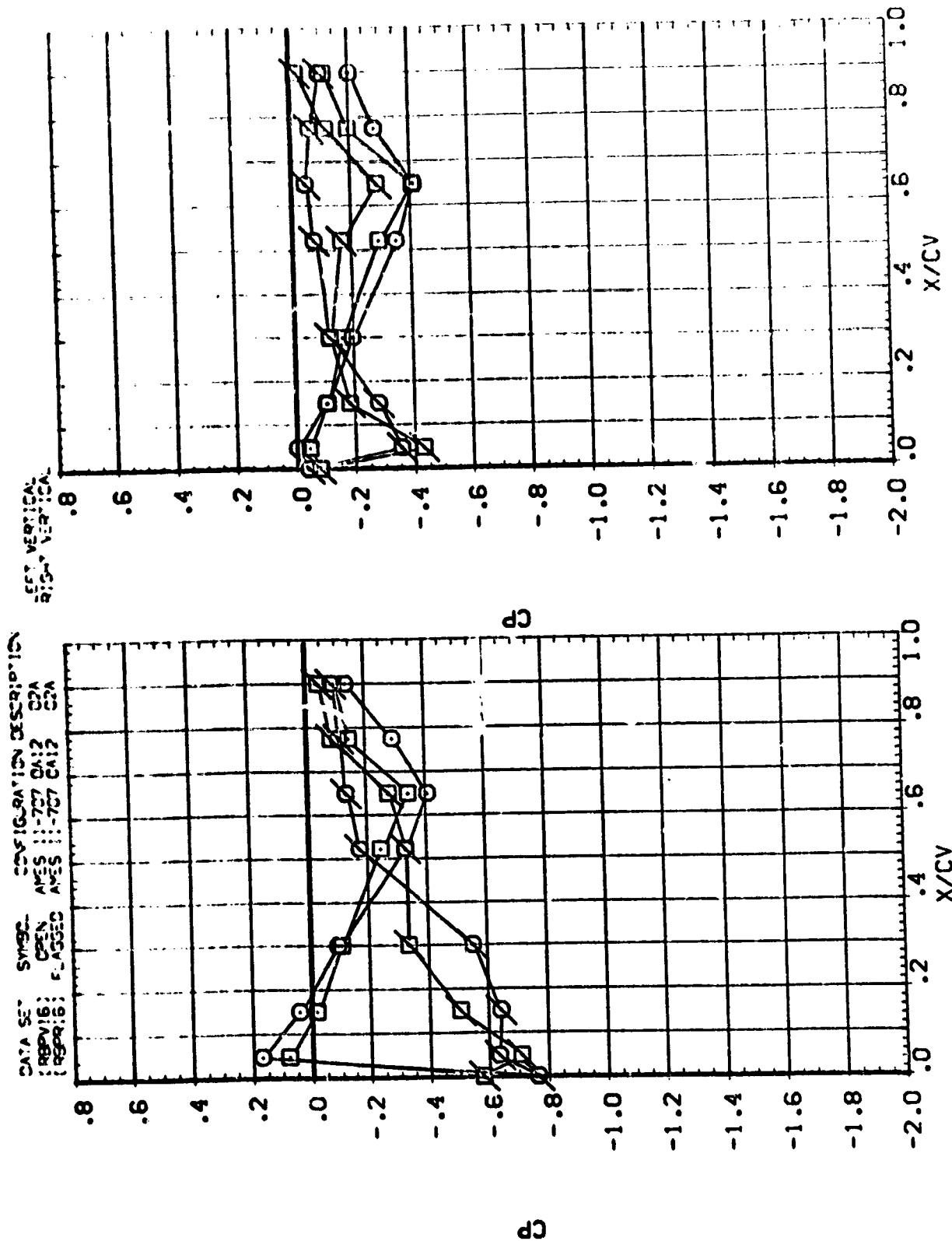
BETA: -7.990 -3.95C

WAG: .599

PARAMETRIC VALUES
ALPHA 20.000
ELEV 1.000

RUBBER 20.000
RUBBER 1.000

DATA SET: SYMBOL-
(RPPV16) OPEN APES 11-757 DAI2 C2A
(RPPV16) CLOSED APES 11-757 DAI2 C2A

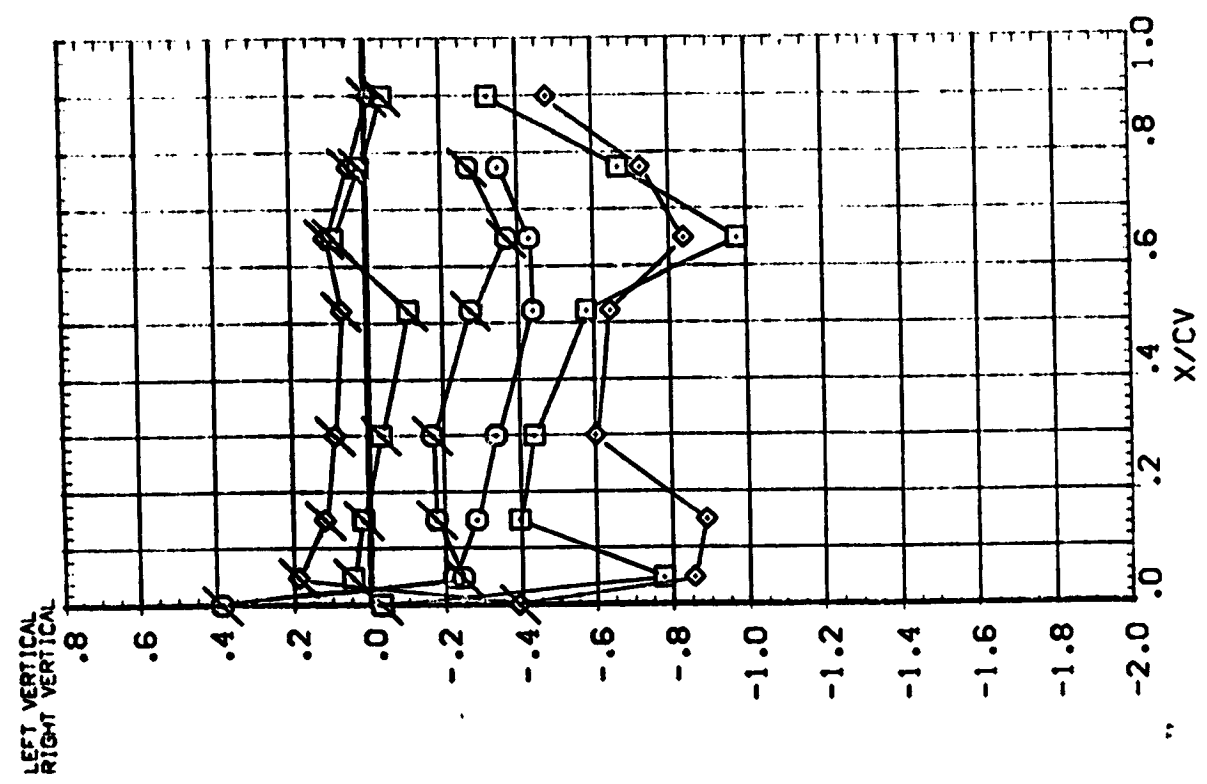
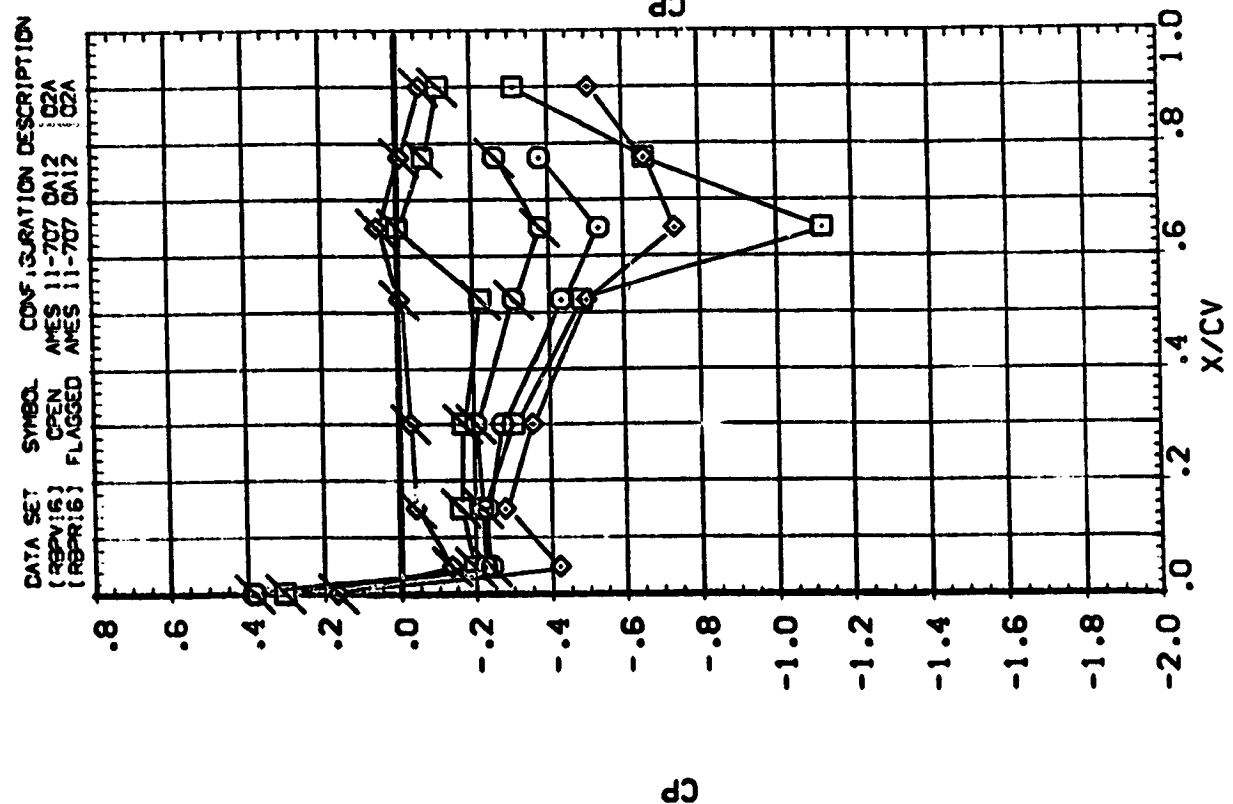


CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES



PARAMETRIC VALUES
ALPHA 20.000
ELEVON .000
RUDDER 20.000
RUDDER .000

SYMBOL Z/BV BETA MACH
○ .158 .100 .599
□ .316 4.200
◇ .600

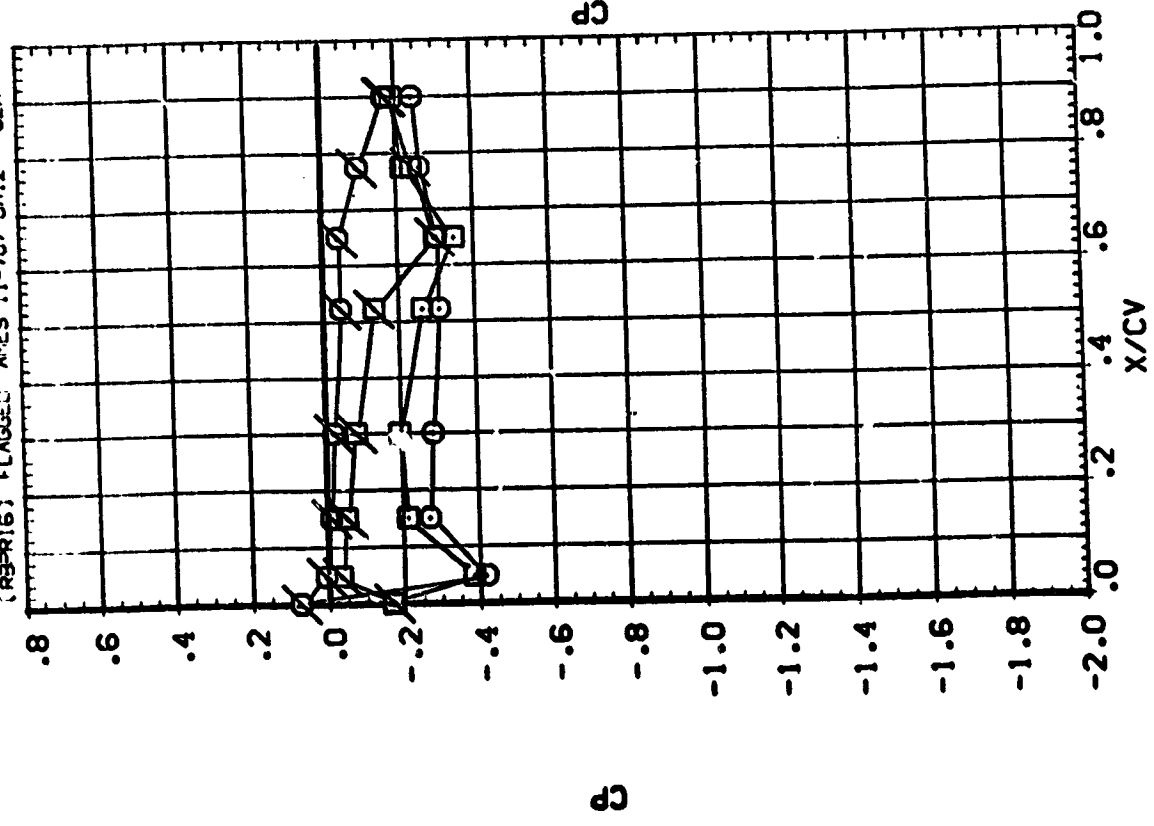
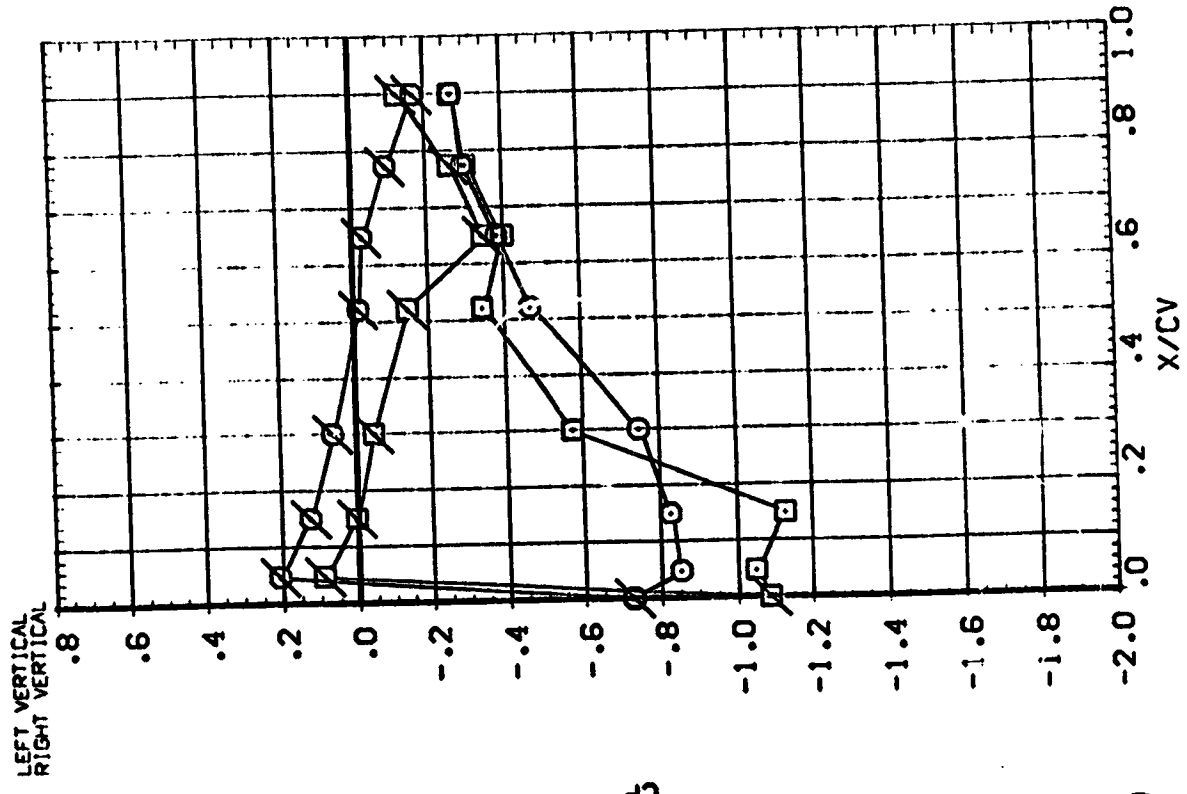


CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETER VALUES
 ALPHA 20.000
 ELEVON 20.000
 RUDDER 20.000
 RUJFLR .000

SYNCH Z/BV .840
 BETA .100
 MACH .599
 9/25 4.200

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RBPV16) OPEN ANES 11-707 DA12 Q2A
 (RBPV16) FLAGGED ANES 11-707 DA12 Q2A



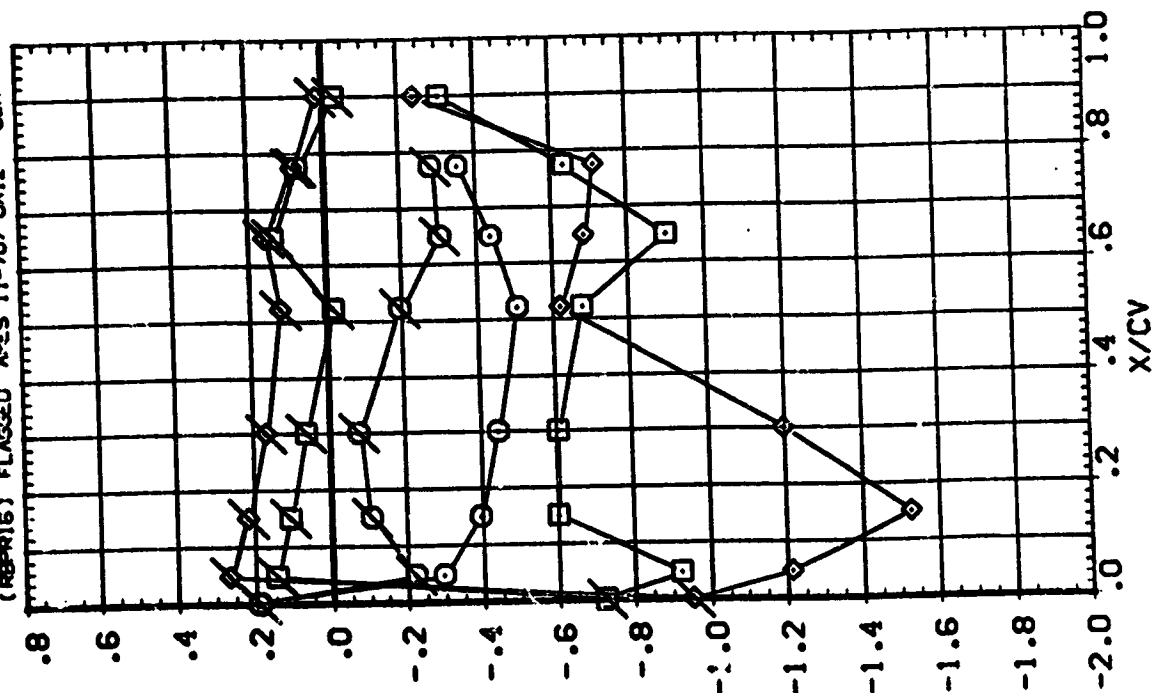
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 20.000 RUDER -20.000
 .000 RUDFLR .000

SYMBOL Z/BV BETA MACH
 .150 .320 .589
 .316
 .600

LEFT VERTICAL
 RIGHT VERTICAL

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RBPV16) AMES 11-707 OA12 OZA
 (RBPV16) FLAGGED AMES 11-707 OA12 OZA

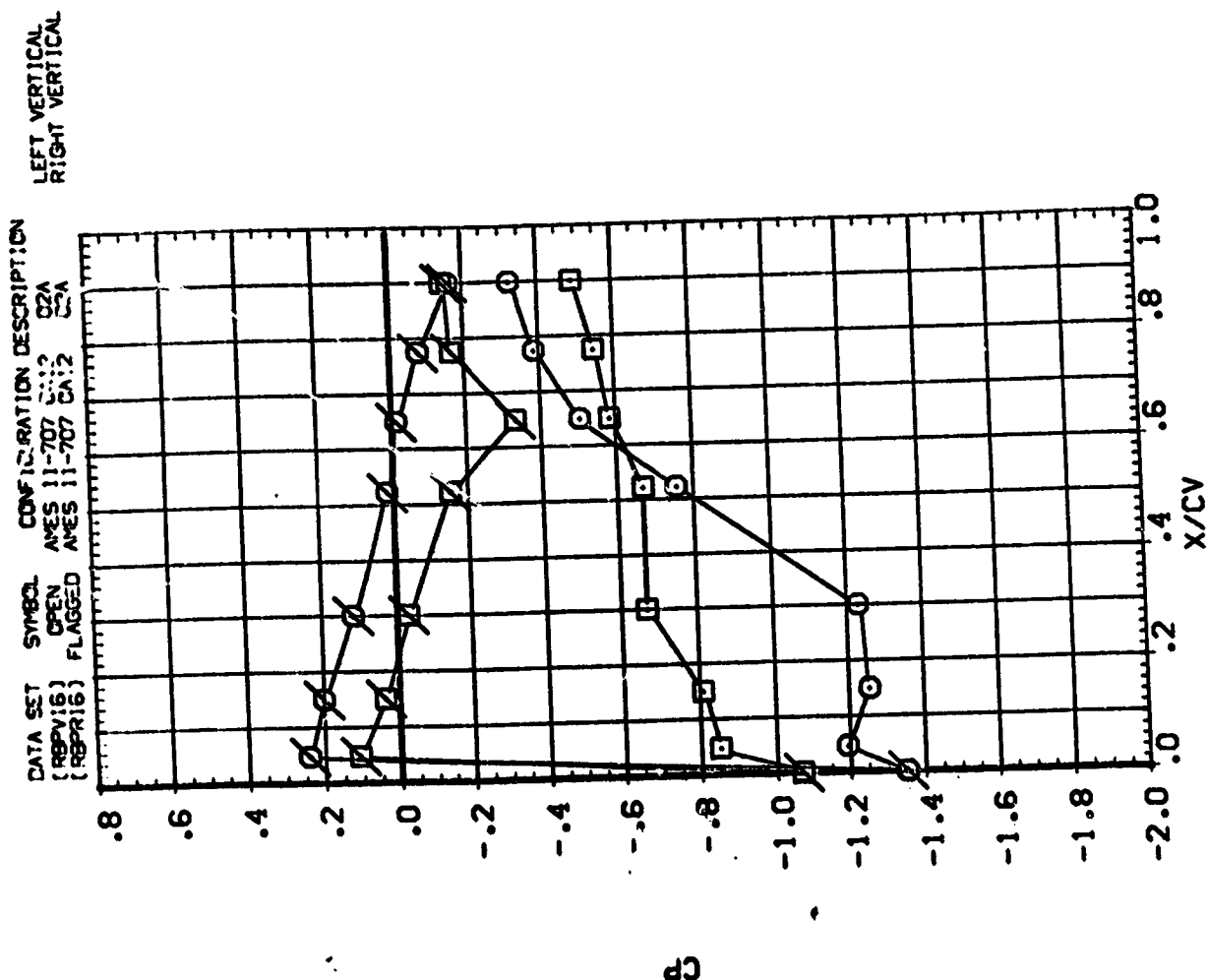


CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 20.000 RUDER
 20.000 RUDER
 .000 RUDER
 .000 RUDER

ALPHA
 ELEVON

SYMBOL Z/BV BETA MACH
 .84C .599
 .925



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES
 PAGE 404

PARAMETRIC VALUES
 20.000 RUDDER -20.000
 .000 RUDFLP .000

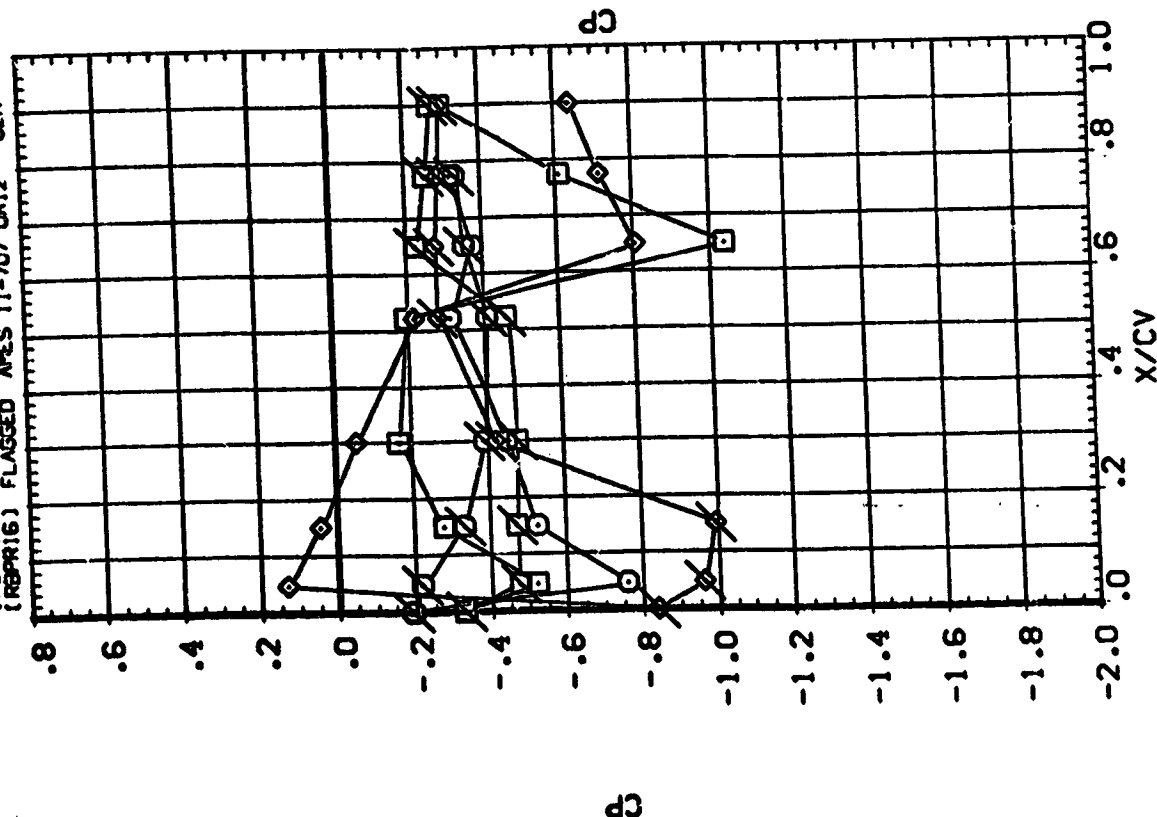
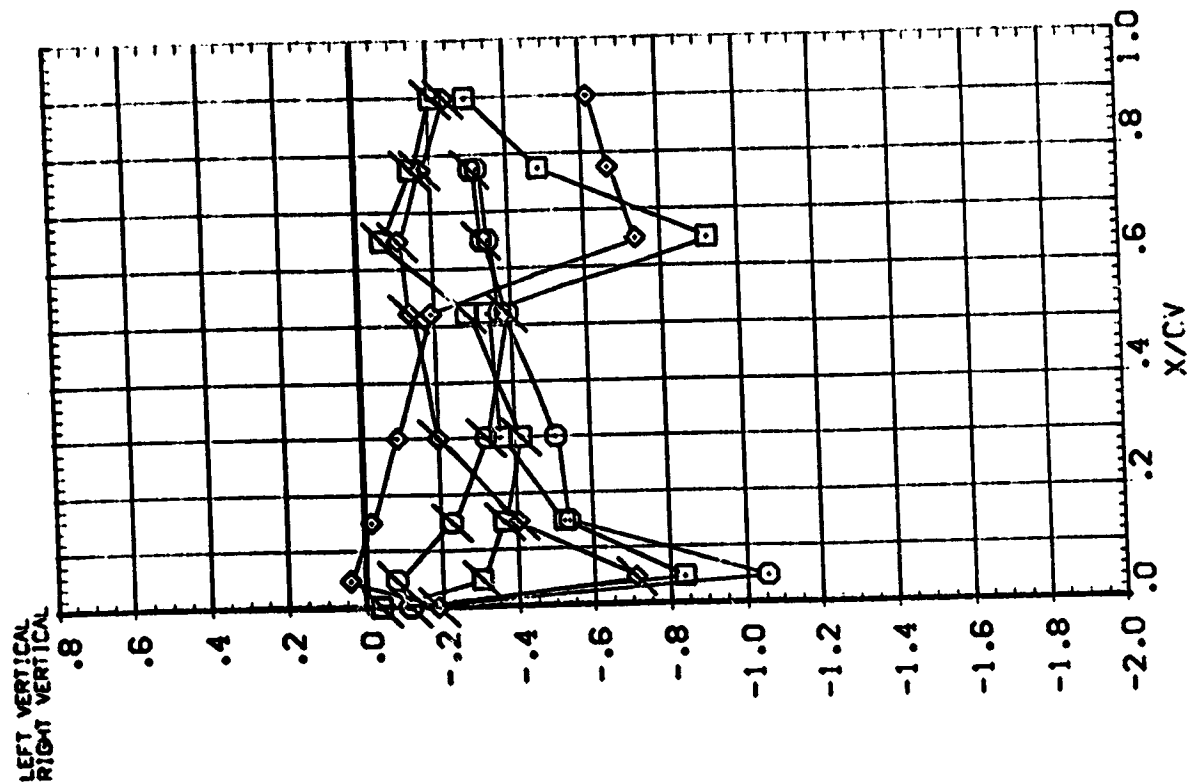
ALPHA
 ELEVON

BETA MACH
 -8.050 .898
 -3.980

SYMBOL Z/BV
 .158
 .316
 .670

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(REP116) OPEN AMES 11-707 DA12 O2A
 (REP116) FLAGGED AMES 11-707 DA12 O2A

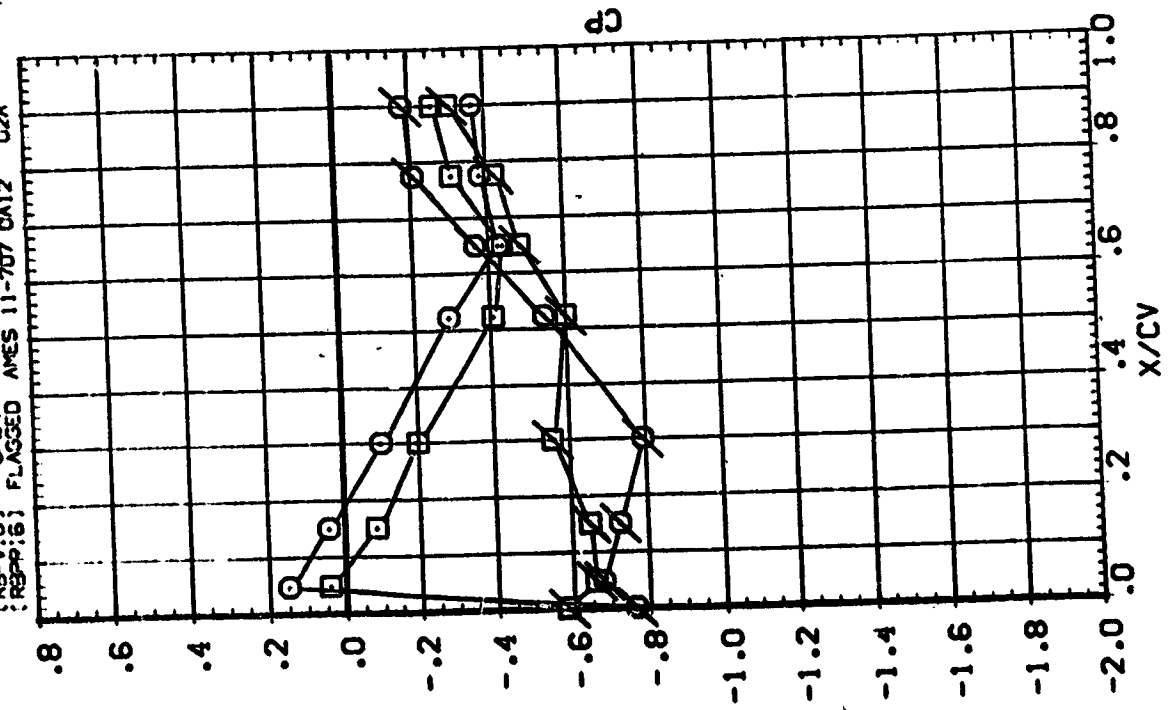
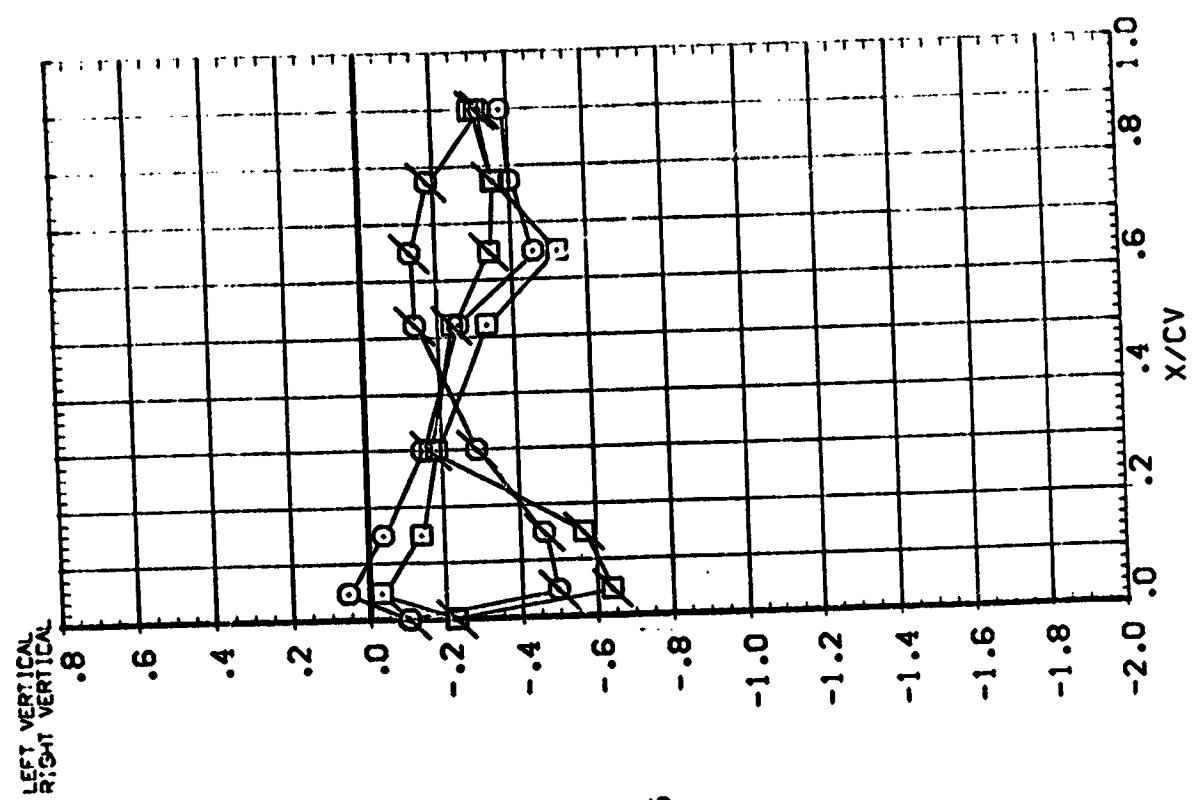


CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE-VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 ALPHA 20.000
 ELEVON .000
 RUDDER .000
 RUDDER -20.000

SYMBOL Z/BV BETA MACH
 .84C .898
 .925 -3.98C

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 AMES 11-707 DA12 02A
 (REPVI:6) OPEN
 (REPPI:6) FLAGGED AMES 11-707 DA12 02A



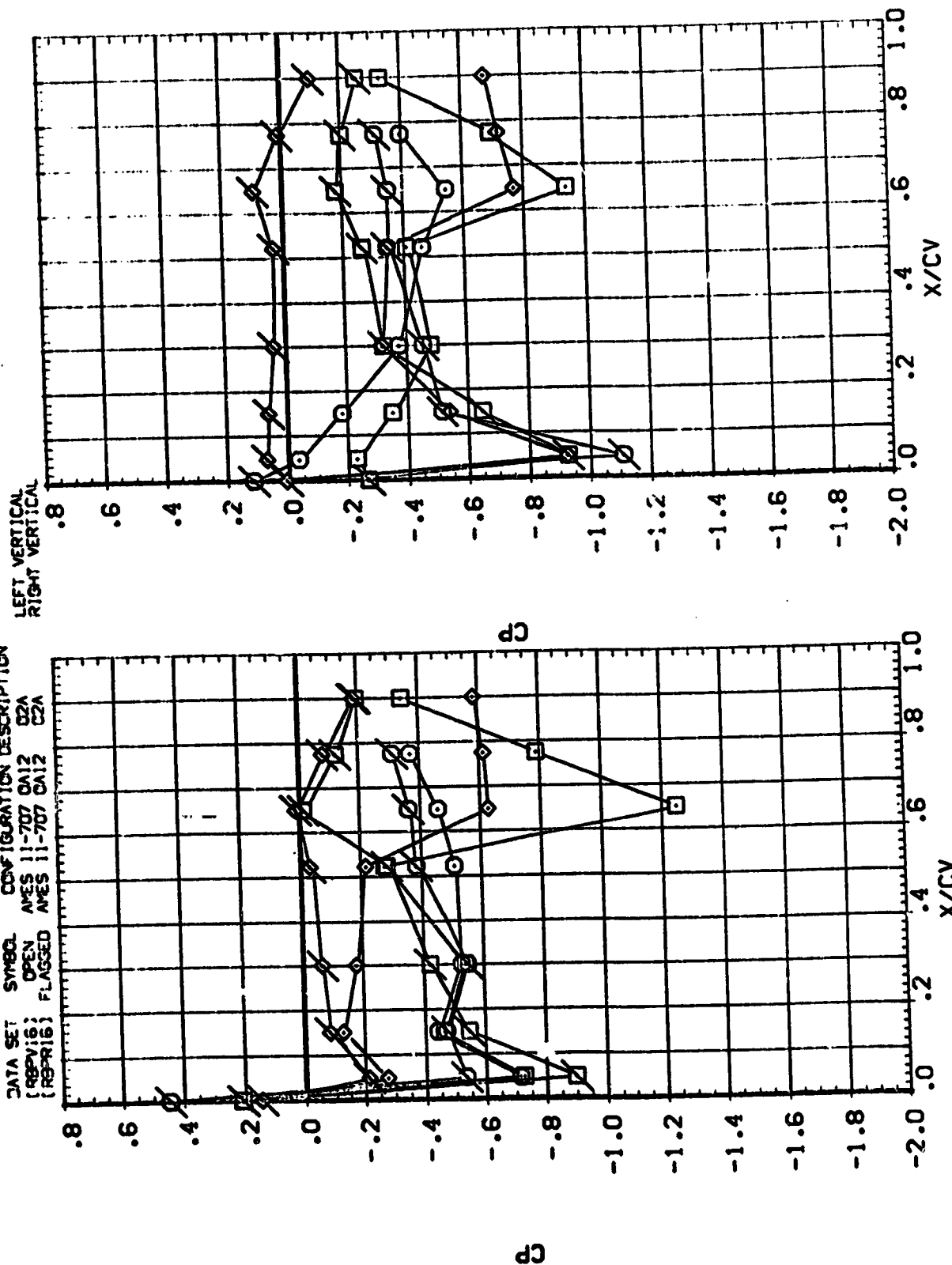
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES



SYMBOL Z/BV BETA MACH
□ .158 .050 .898
□ .316 4.240
◇ .600

PARAMETER VALUES
ALPHA 20.000
ELEVEN 20.000
RUFER 20.000
RUFELR 20.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
[RBPV16] OPEN AMES 11-707 OA12 C2A
[RBPV16] FLAGGED AMES 11-707 OA12 C2A



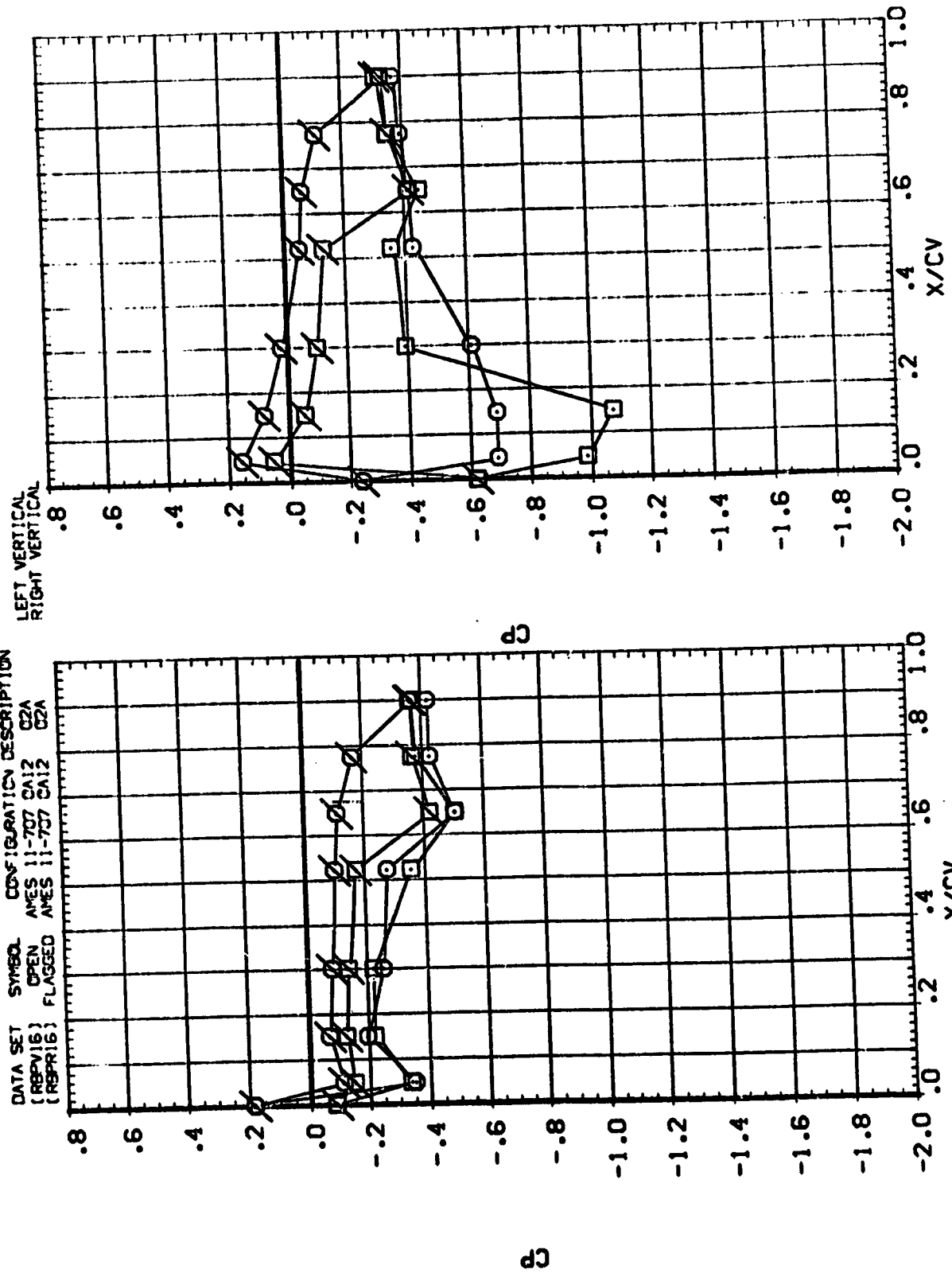
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 20.000 FLDCR .000
 20.000 RUFLR .000

ALPHA
 ELEVON

SYMBOL Z/BV BETA MACH
 .840 .090 .898
 .925 4.240

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [RBPV16] OPEN AVES 11-707 CA12 02A
 [RBPV16] FLAGED AVES 11-707 CA12 02A



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

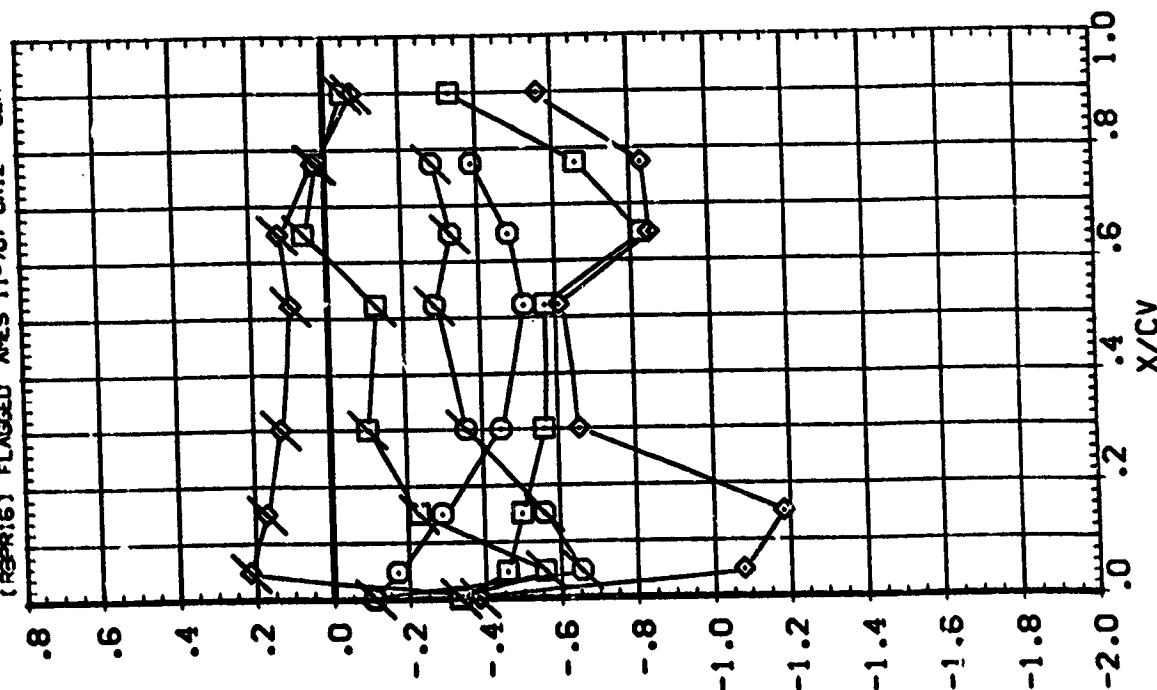
PARAMETRIC VALUES
 20.000 RUMBER
 .000 RUMBER
 -20.000 RUMBER

ALPHA
 ELEVON

SYMBOL Z/BV BETA MACH
 .158
 .316
 .600
 8.370 .898

LEFT VERTICAL
 RIGHT VERTICAL

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RBPV16) OPEN ANES 11-707 CA12 D2A
 (RBPV16) FLAGGED ANES 11-707 CA12 C2A



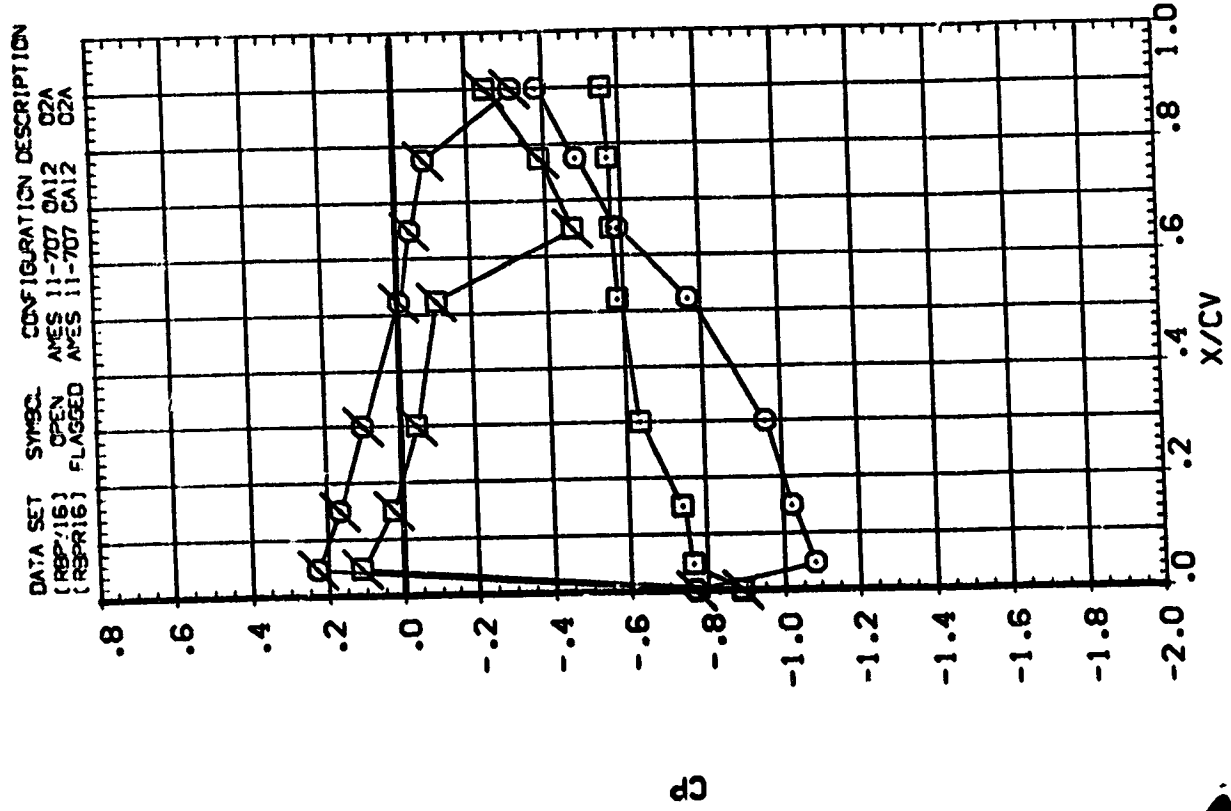
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 20.000 RUDDER
 .000 RUDELR
 -20.000

ALPHA
 ELEVON

SYNCS. Z/BV BETA MACH
 .840 8.370 .898
 .975

LEFT VERTICAL
 RIGHT VERTICAL



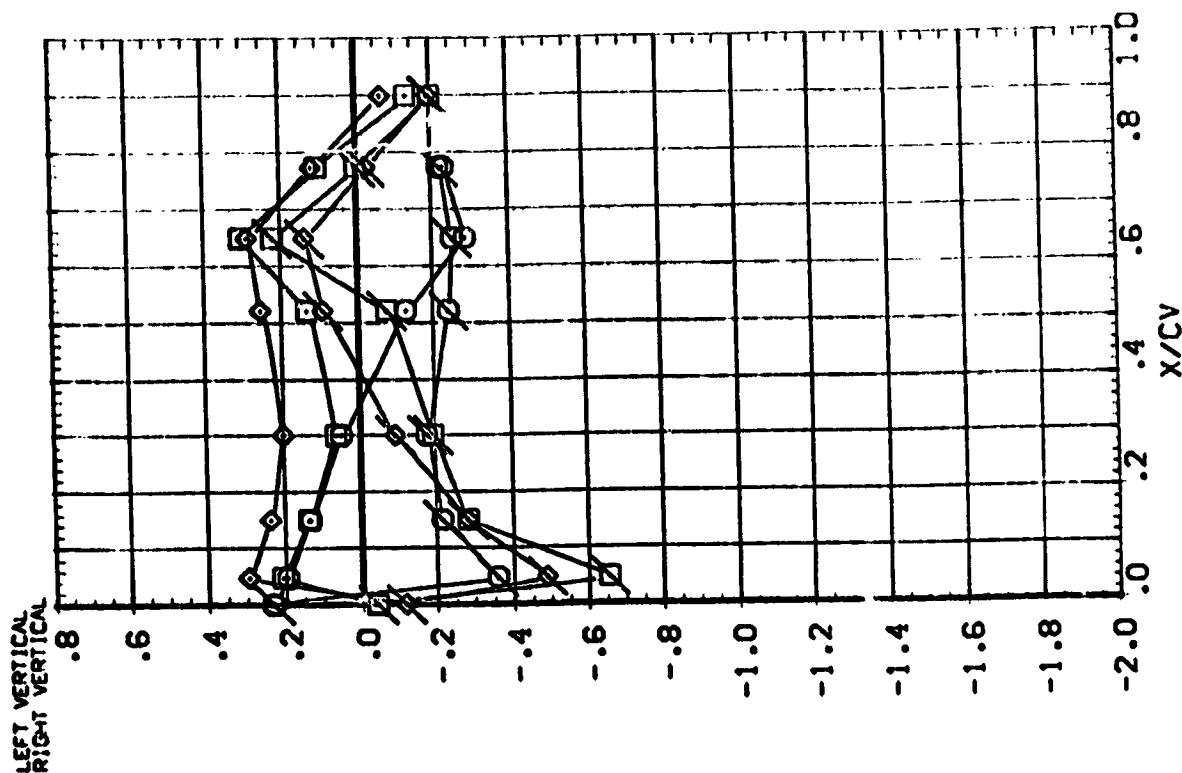
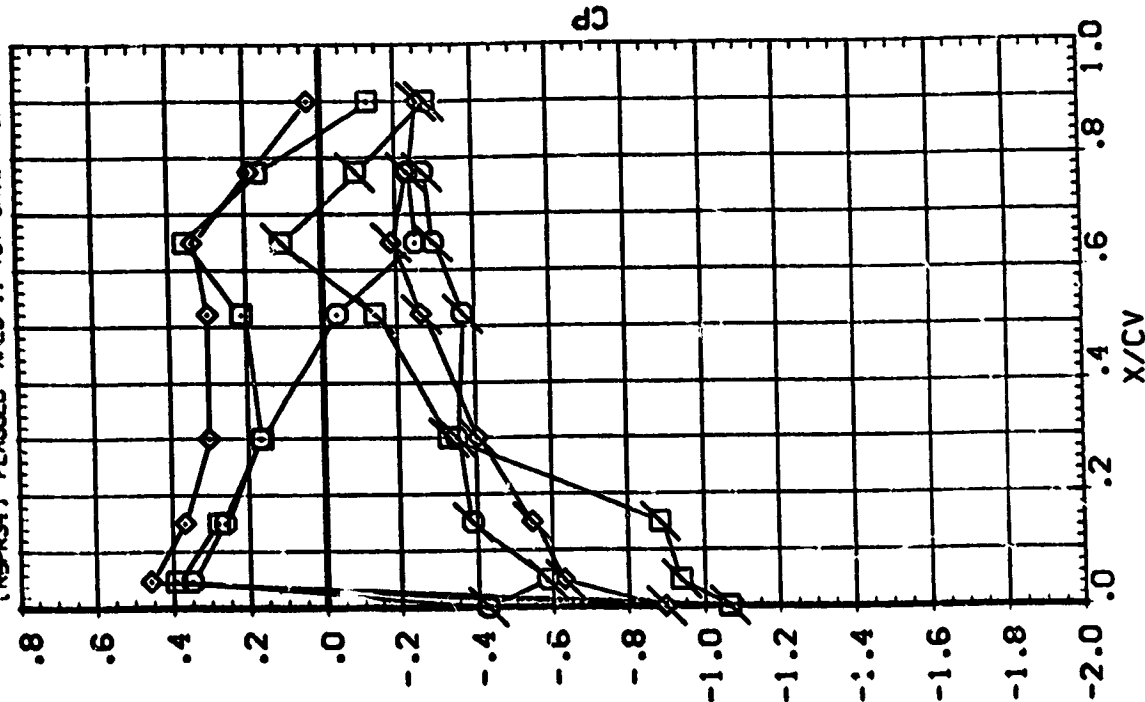
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

ALPHA
ELEVEN

BETA	MACH
-7.990	.599
-3.950	

SYMBOL	Z/BV
○	.158
□	.316
◇	.600

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(RSPV34)	OPEN	AVES 11-707 DA12 02A
(RSPV24)	ELARGED	AVES 11-707 DA12 02A

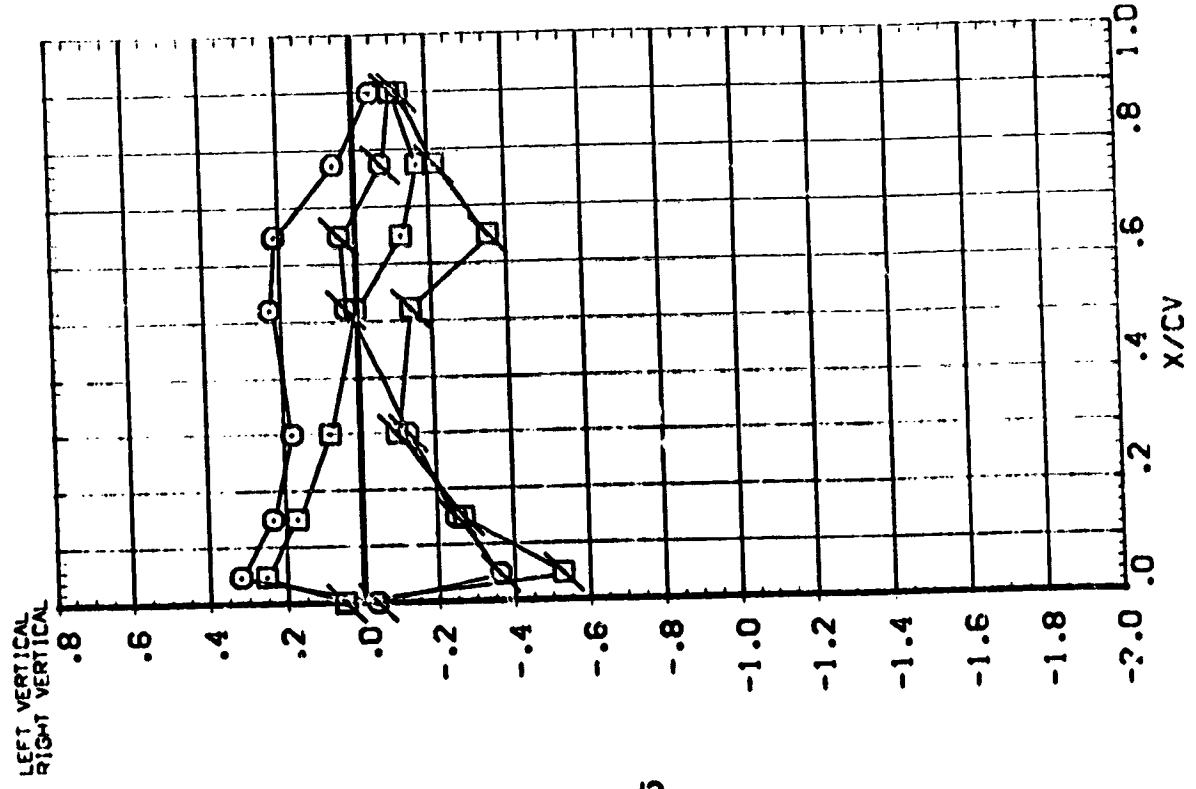
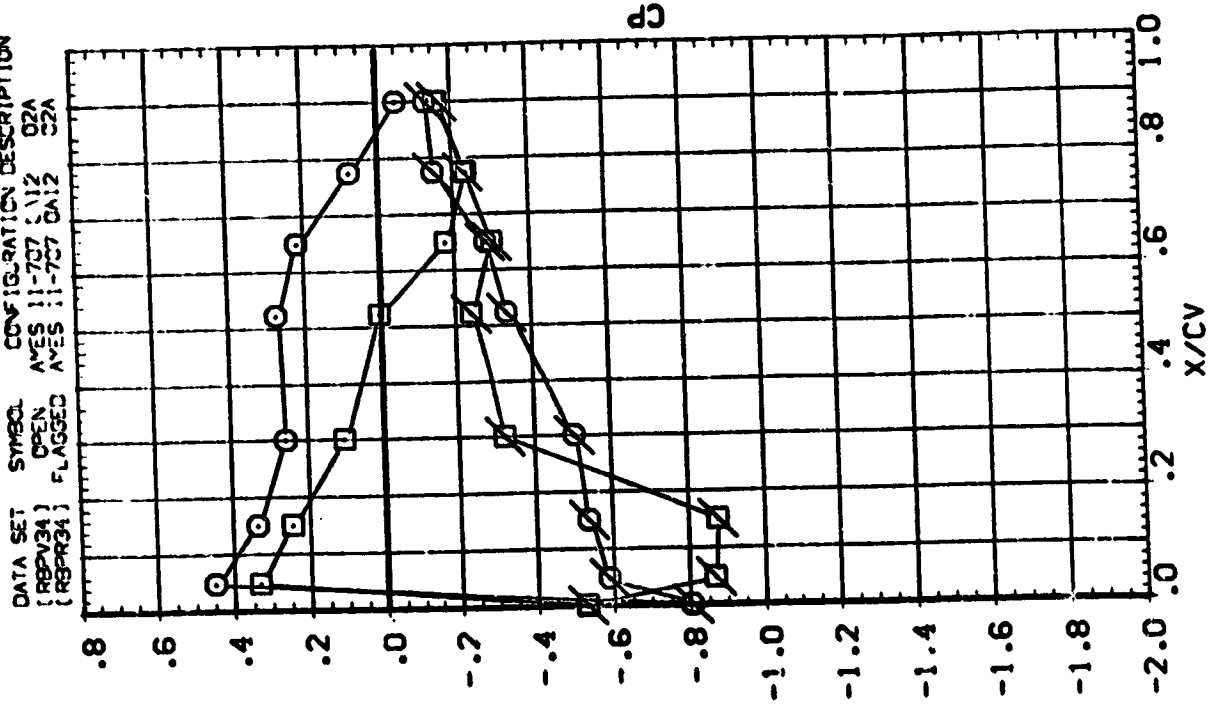


CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES	
ROOBER	.000
ROOBER	40.000

SYNCD	Z/B	BETA	MACI
0	.040	-7.990	.599
1	.925	-3.950	

DATA SET	SYMBOL	CONFIGURATION	DESCRIPTION
[RBPV34]	OPEN	AVES 11-707	02A 02A
[RBP34]	FLAGGED	AVES 11-707	0A12 02A



X/CV

CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PAGE

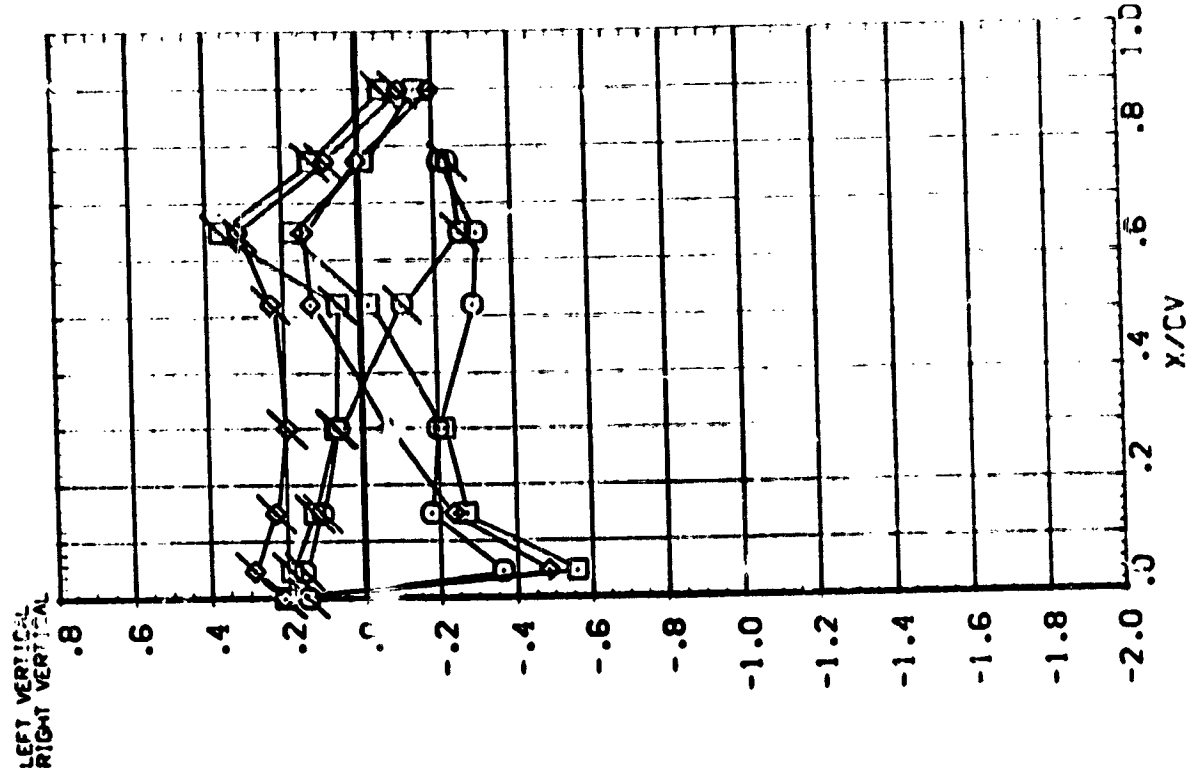
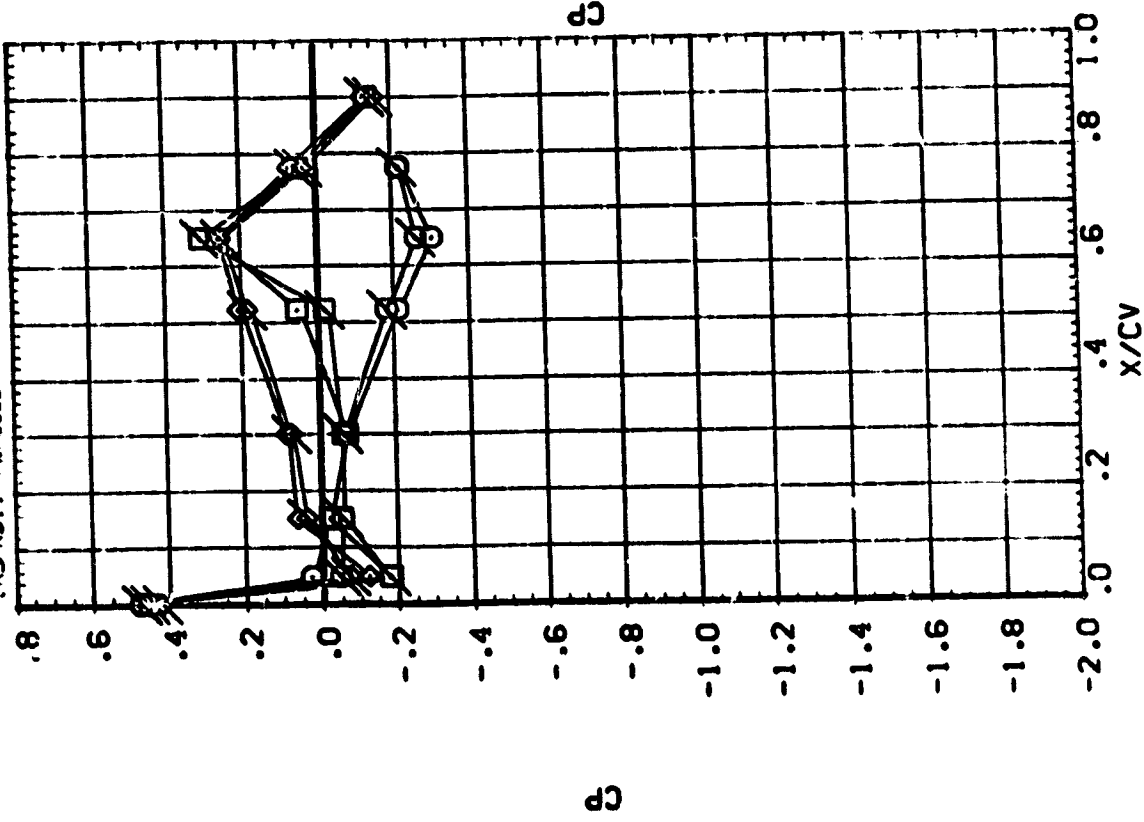


SYMBOL Z/BV
 □ .50
 ○ .316
 ◇ .600

BETA MACH
 .050 .599
 4.200

DIAMETRIC VALUES
 ALPHA
 .000 RADIUS
 .000 RADIUS
 40.000 ELEV

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RBPV34) OPEN AVES 11-707 CA:2 C2A
 (RBPV34) FLAGGED AVES 11-707 CA:2 C2A





SYNOPSIS

Z/BV
.84C
.575

BETA
.090
4.700

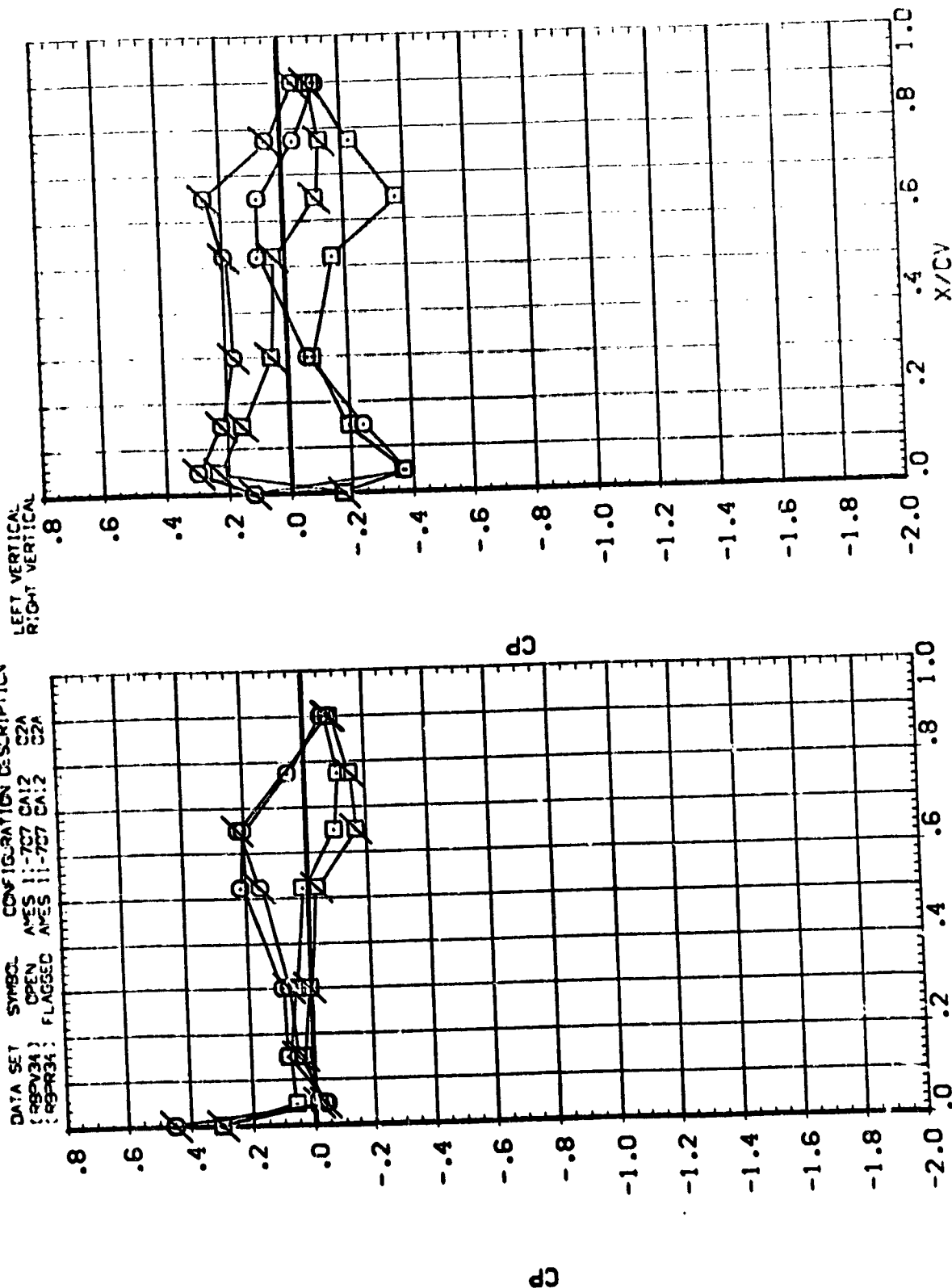
MACH
.599

PARAMETRIC VALUES

ALPHA
3.500

.000
2.000
40.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
RBPV34: OPEN AMES 11-707 CA:2 C2A
RBPV34: FLAGGED AMES 11-707 CA:2 C2A

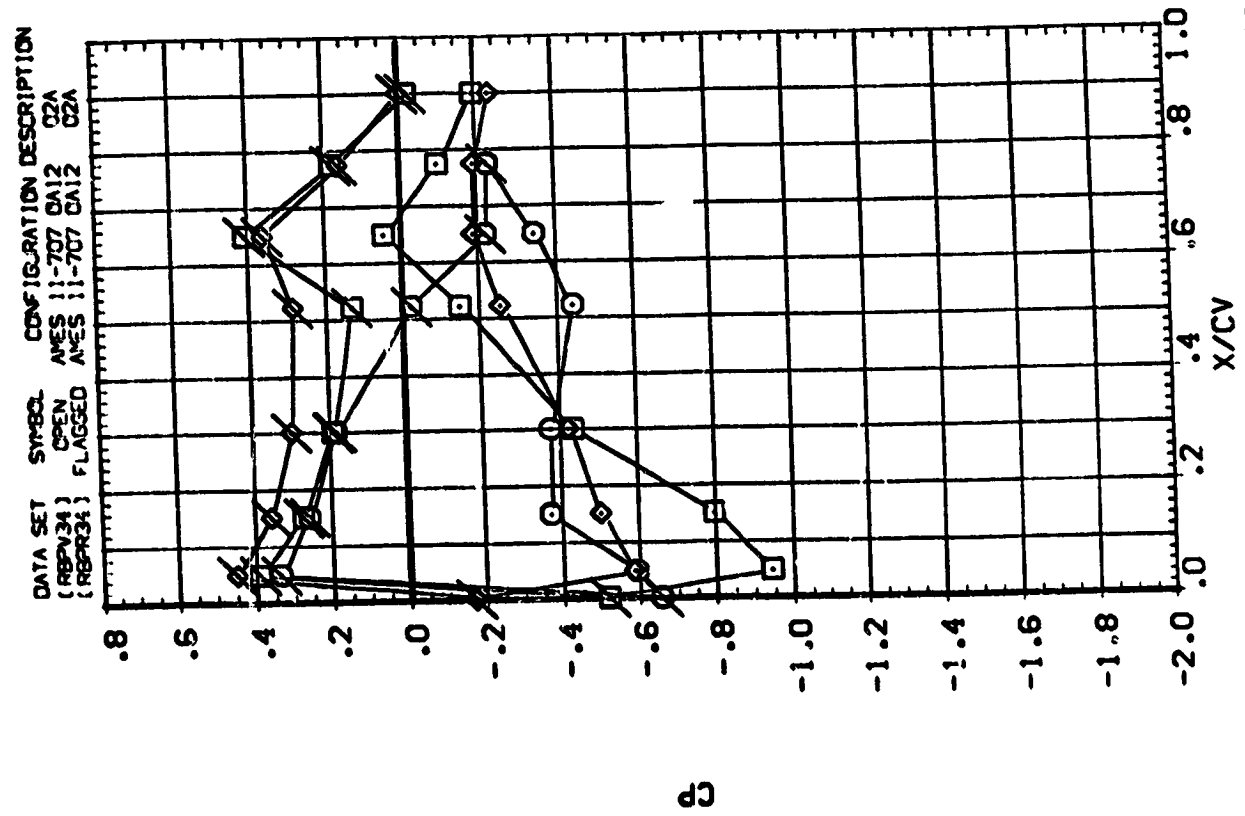


CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

ALFA
 ELEVON
 .000
 R3FLR
 40.000

SYMBOL Z/BV BETA MACH
 .158 0.310 .599
 .316
 .600

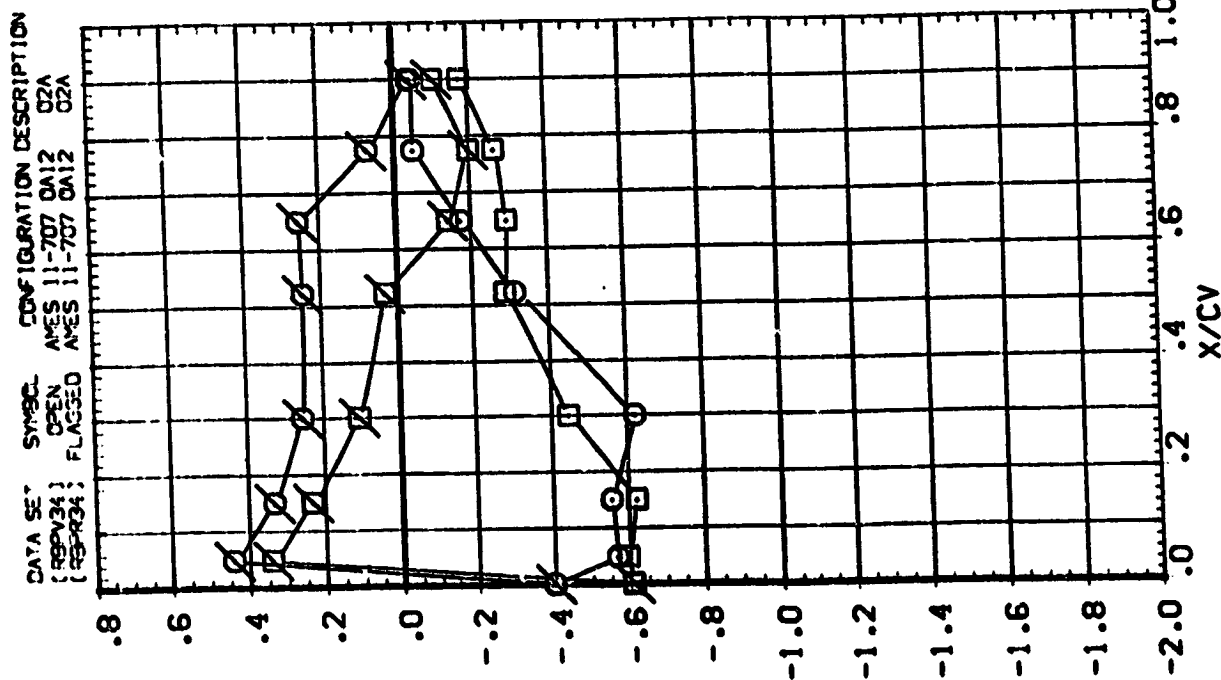
LEFT VERTICAL
 RIGHT VERTICAL



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES
 PAGE 4:5

26

LEFT VERTICAL
RIGHT VERTICAL



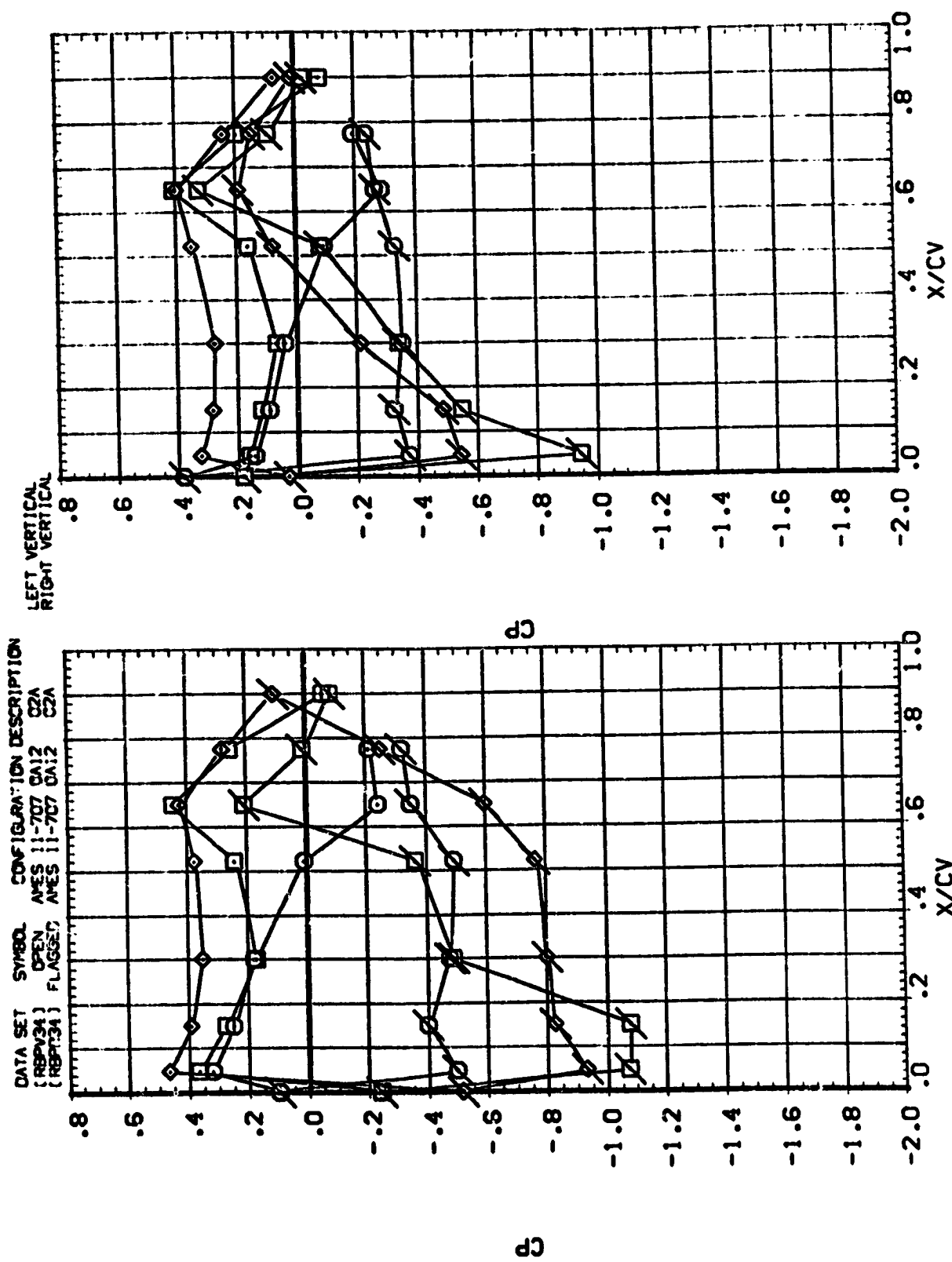
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

SYMBOL Z/BV BETA MACH
 .158 -8.100 .899
 .316 -4.010
 .600

ALPHA
 ELEVON

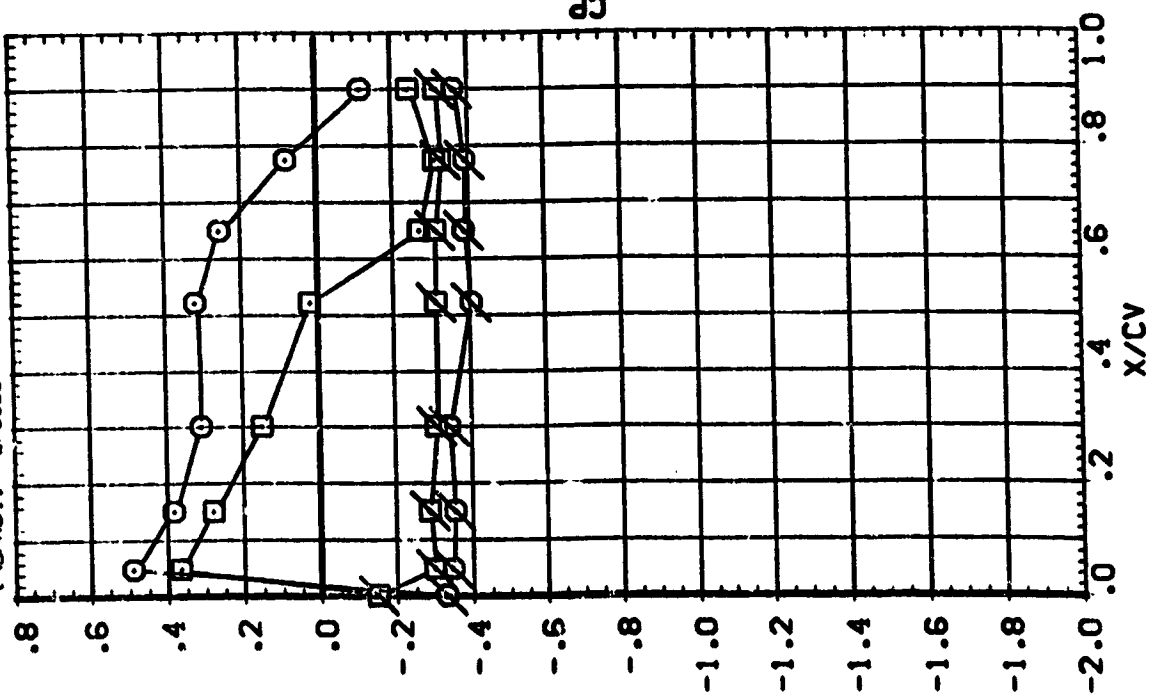
.000 .000 .000
 .000 .000 .000
 .000 .000 .000

.000 .000 .000
 .000 .000 .000
 .000 .000 .000



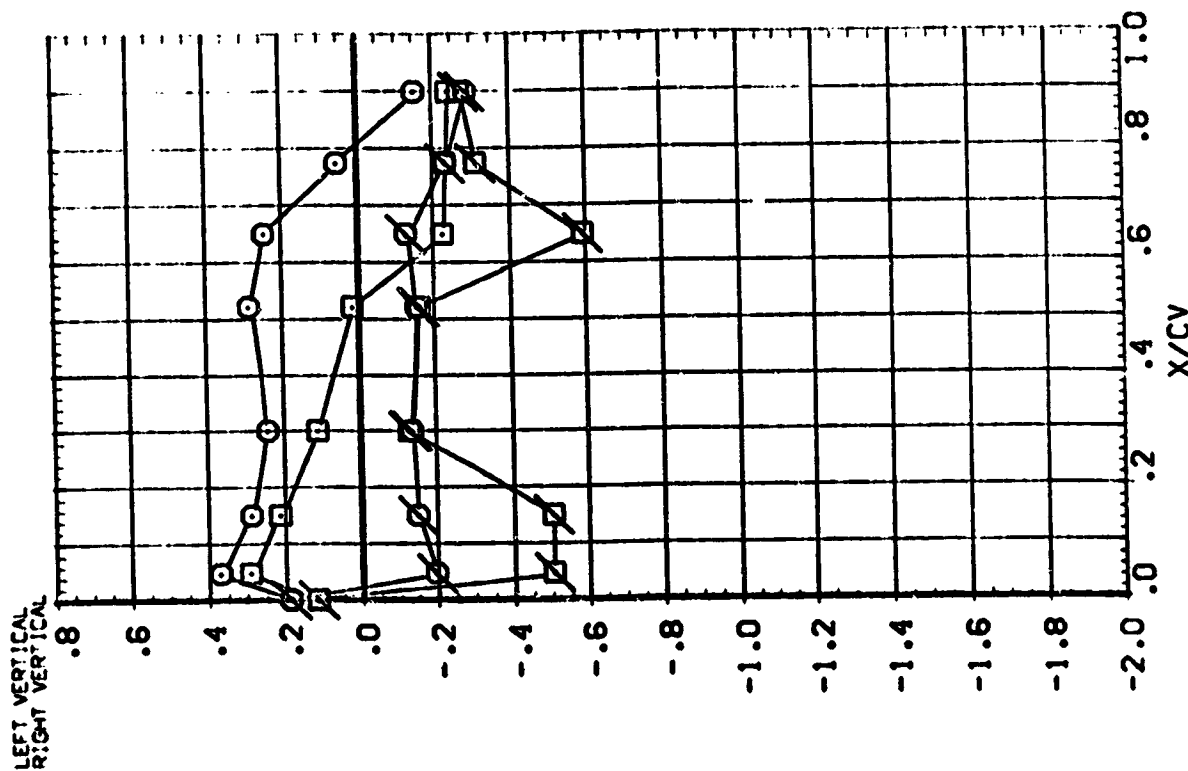
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (BBPV34) OPEN AXES 11-707 DA12 O2A
 (BBPV34) FLAGGED AXES 11-707 DA12 O2A



C_p

C_p



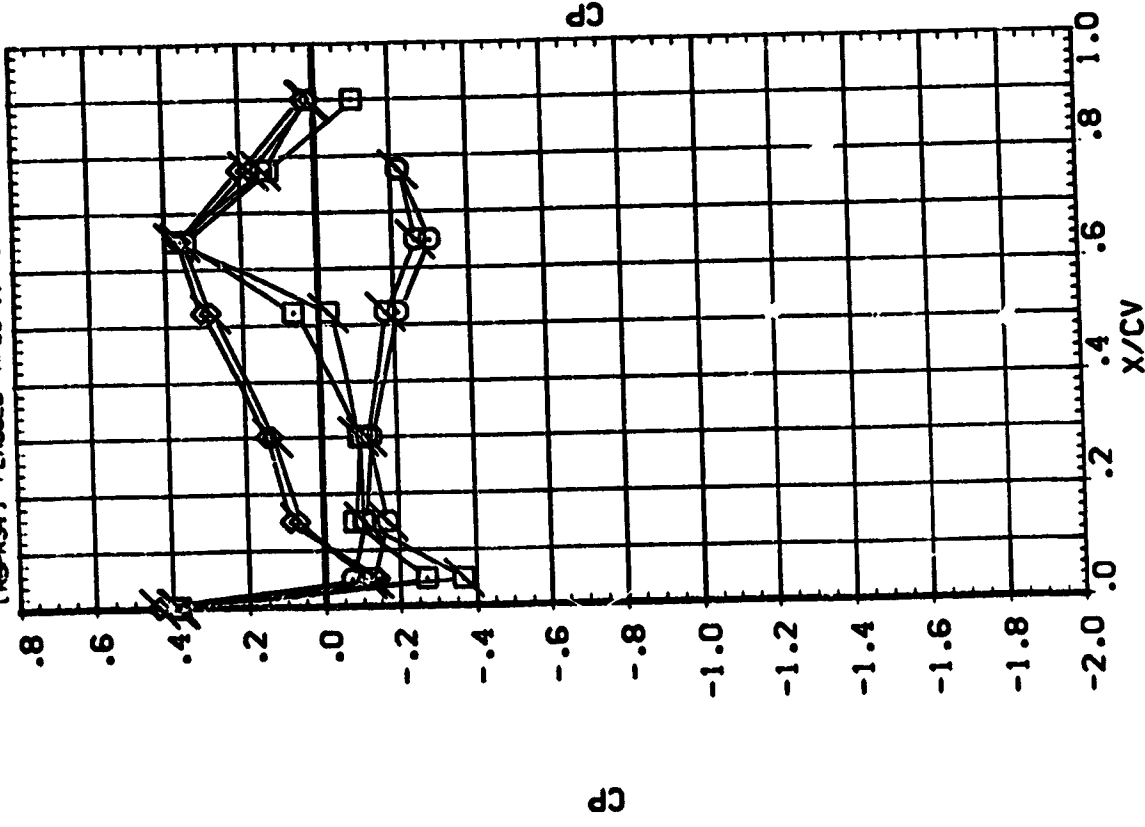
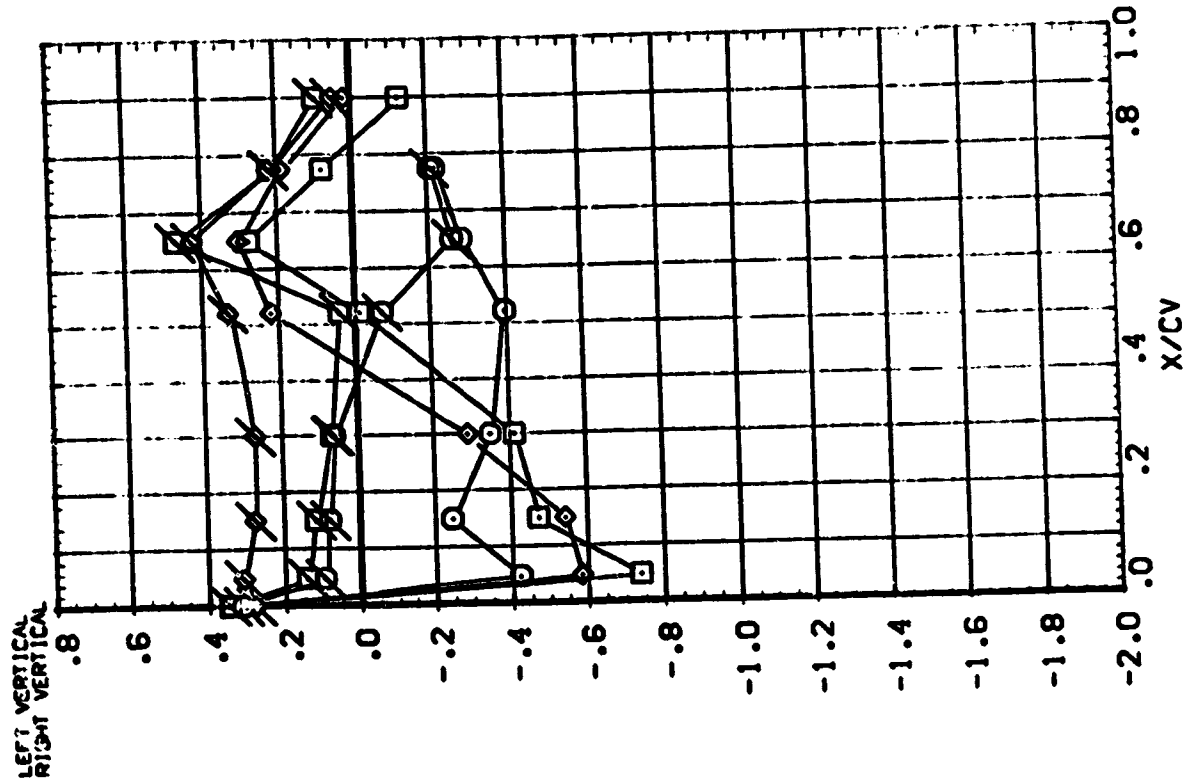
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 .000 .000 .000 .000
 .000 .000 .000 .000
 .000 .000 .000 .000
 .000 .000 .000 .000

ALPHA
 ELEVON

SYMBOL Z/BV BETA MACH
 .150 .080 .899
 .316 4.250
 .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RE-34) OPEN ANES 11-707 CA12 CZA
 (RE-34) FLAGGED ANES 11-707 CA12 CZA



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

SYMBOL 2/5V .84C .925

BE'A .38C 4.25C

MACH .889

ALPHA ELEVON

4.000 40.000

4.000 40.000

4.000 40.000

4.000 40.000

4.000 40.000

4.000 40.000

4.000 40.000

4.000 40.000

4.000 40.000

4.000 40.000

4.000 40.000

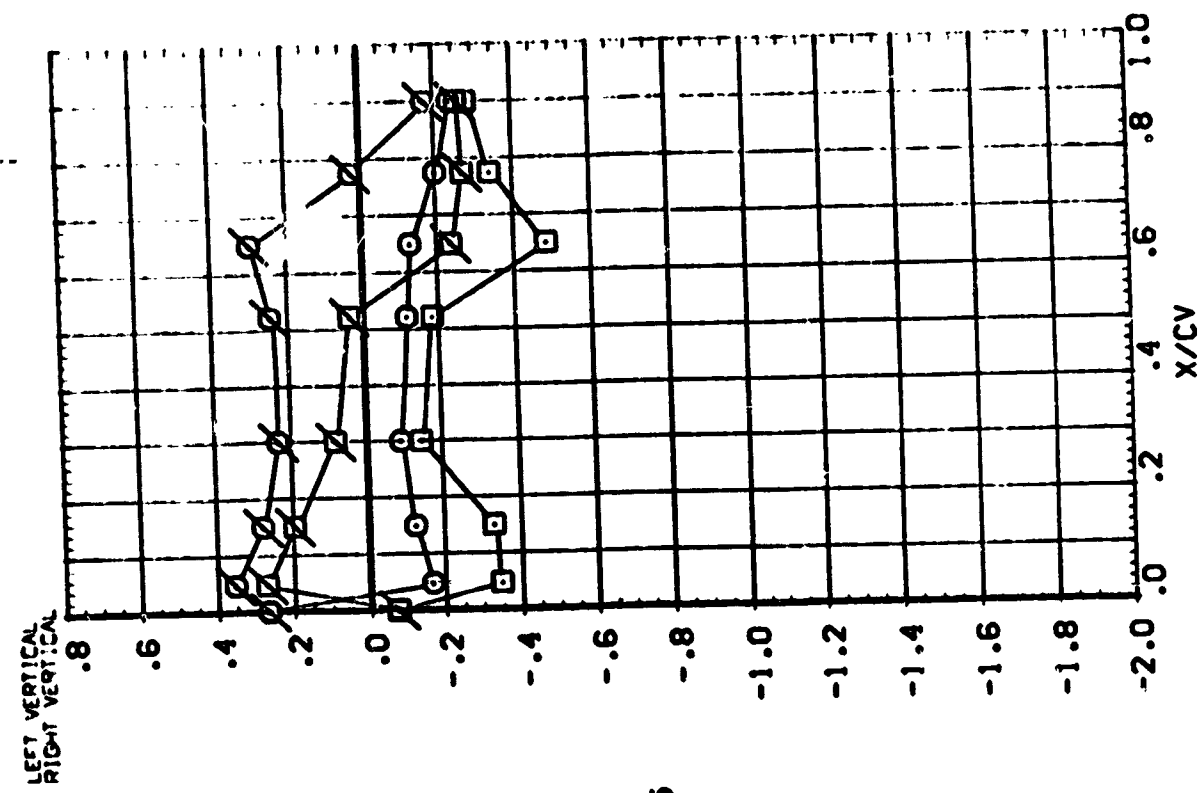
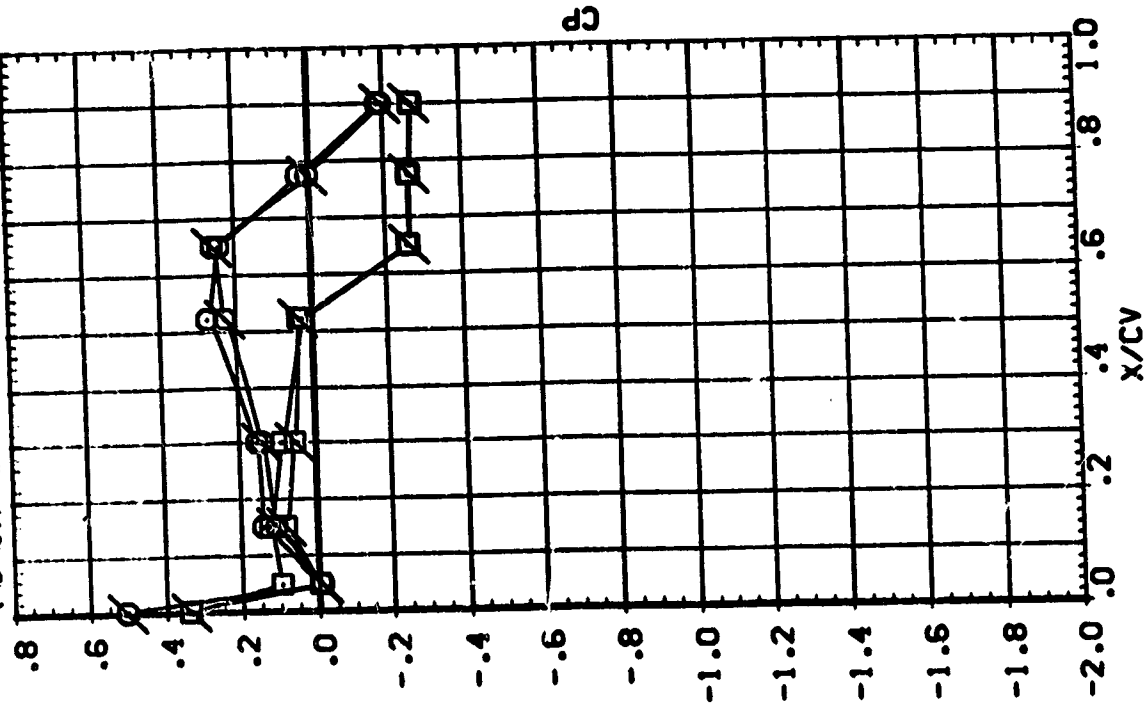
4.000 40.000

4.000 40.000

4.000 40.000

4.000 40.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RSPV34) OPEN APES 11-707 OA12 C2A
 (RSPV34) FLASSED APES 11-707 OA12 C2A



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

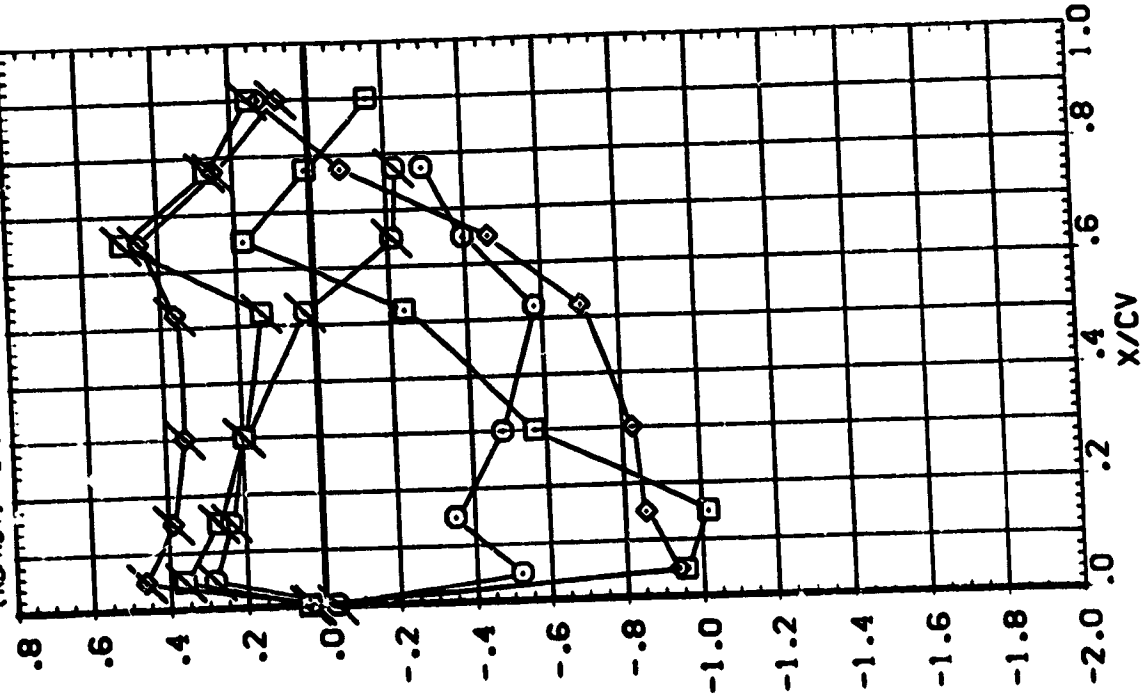
PARAMETRIC VALUES
 .000 RCDER
 .000 RCDLR
 40.000

ALPHA
 ELEVON

SYMBOL Z/BV BETA MACH
 .158
 .316
 .600

LEFT VERTICAL
 RIGHT VERTICAL

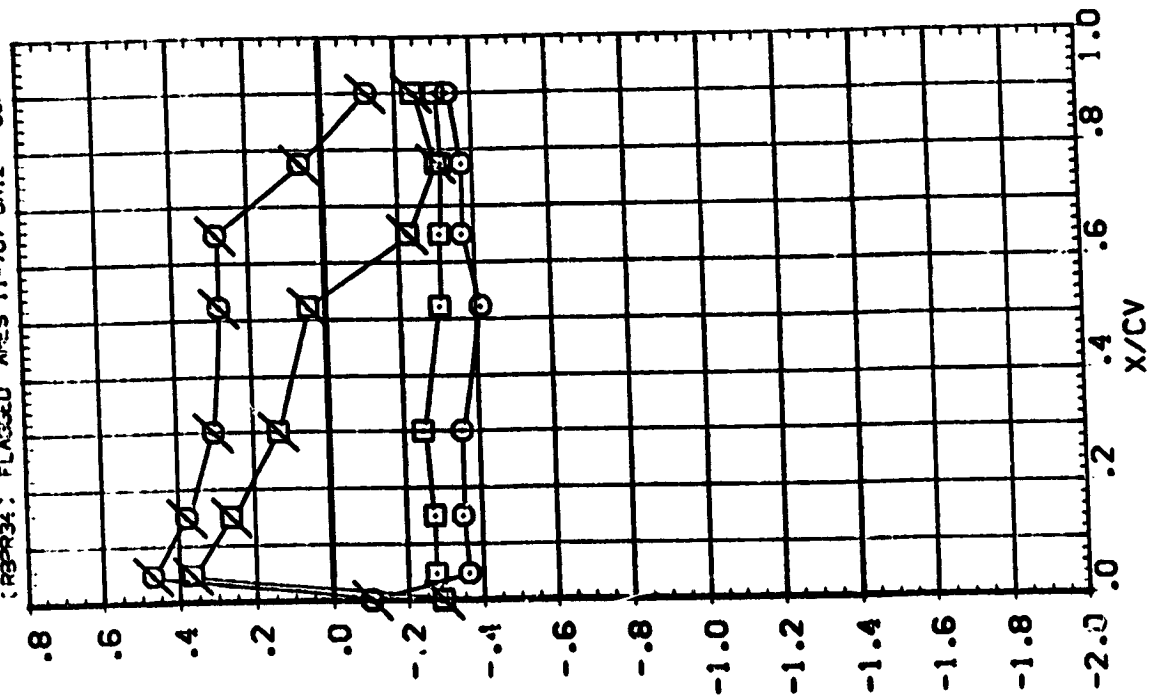
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REP34) OPEN APES 11-707 CA12 Q2A
 (REP34) FLAGGED APES 11-707 CA12 Q2A



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
RP3V34	CPEN	AMES 11-707 CA:2 C2A
RP3R34	FLAGED	AMES 11-707 CA:2 C2A

LEFT VERTICAL
RIGHT VERTICAL

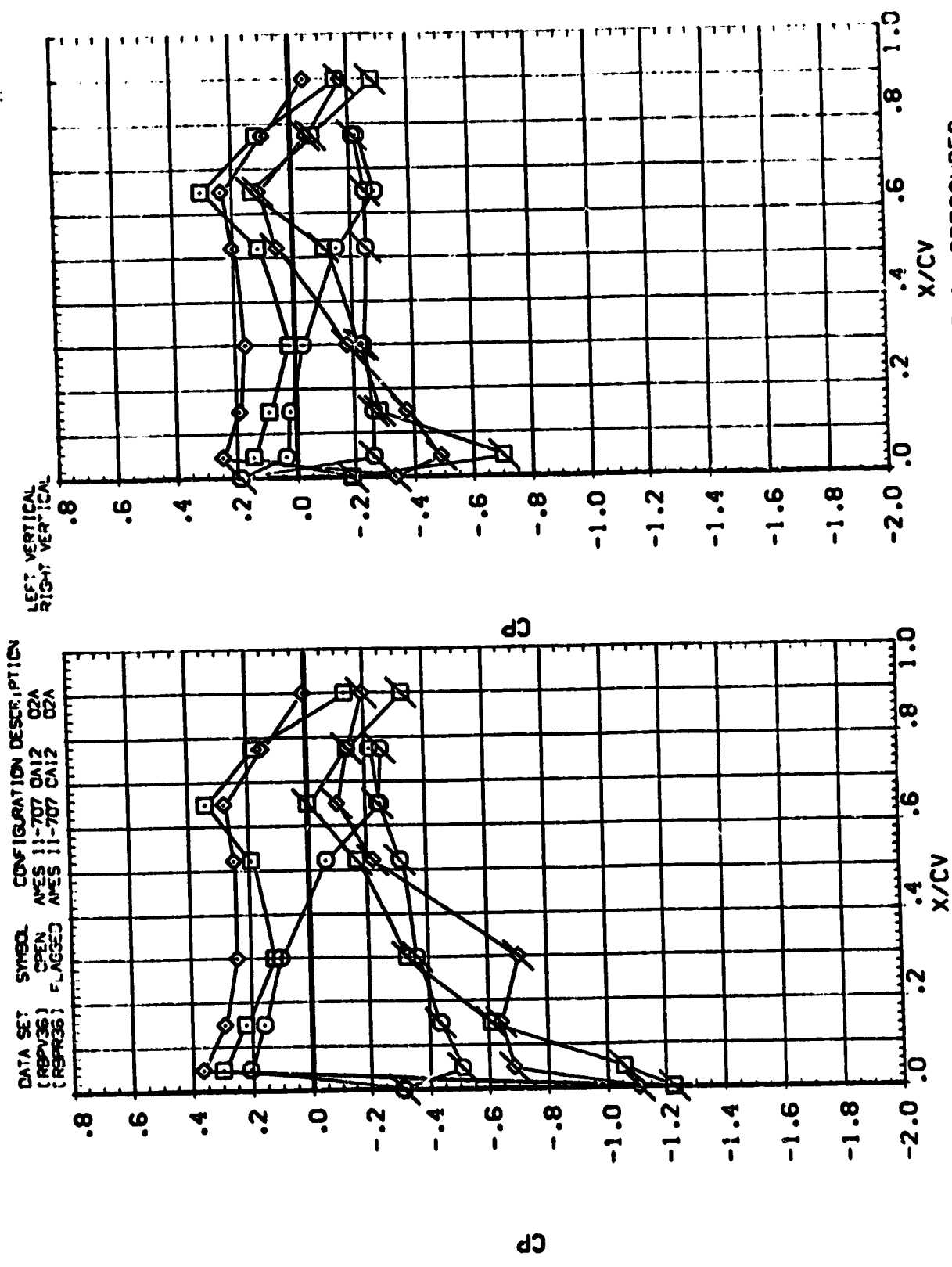


CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 10.000 RUSLER
 .000 RUSLER
 40.000

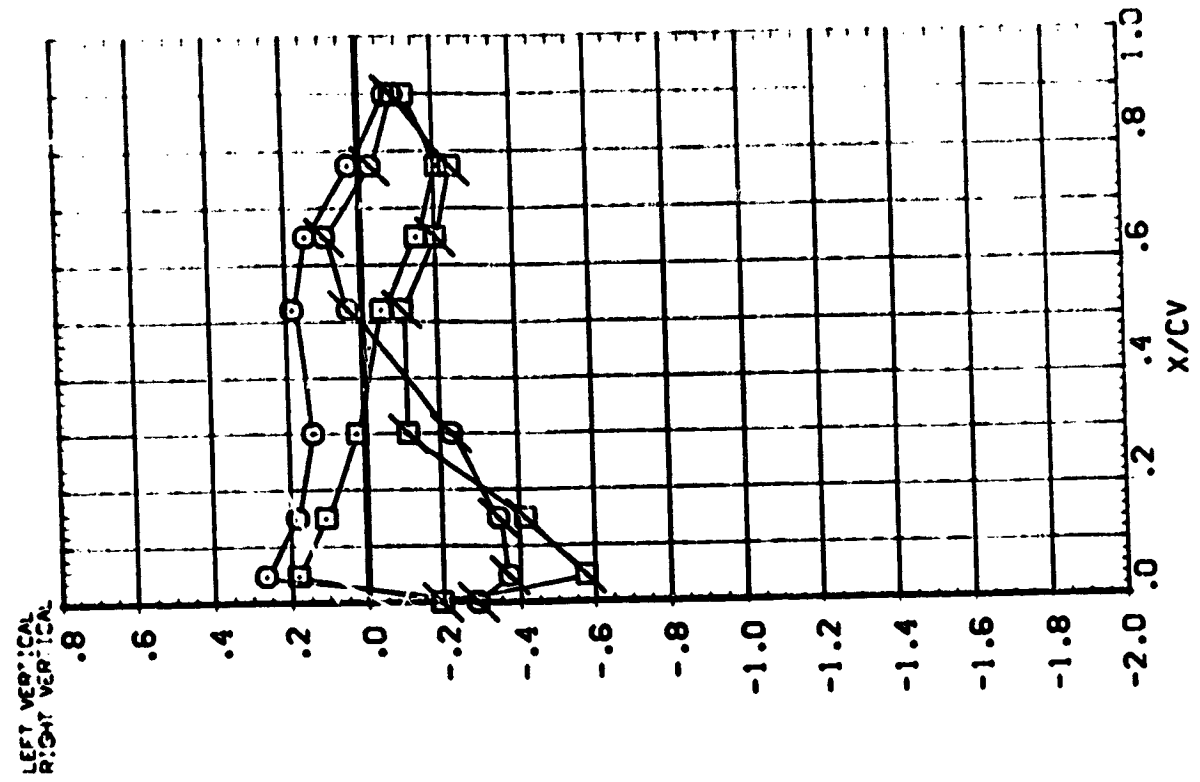
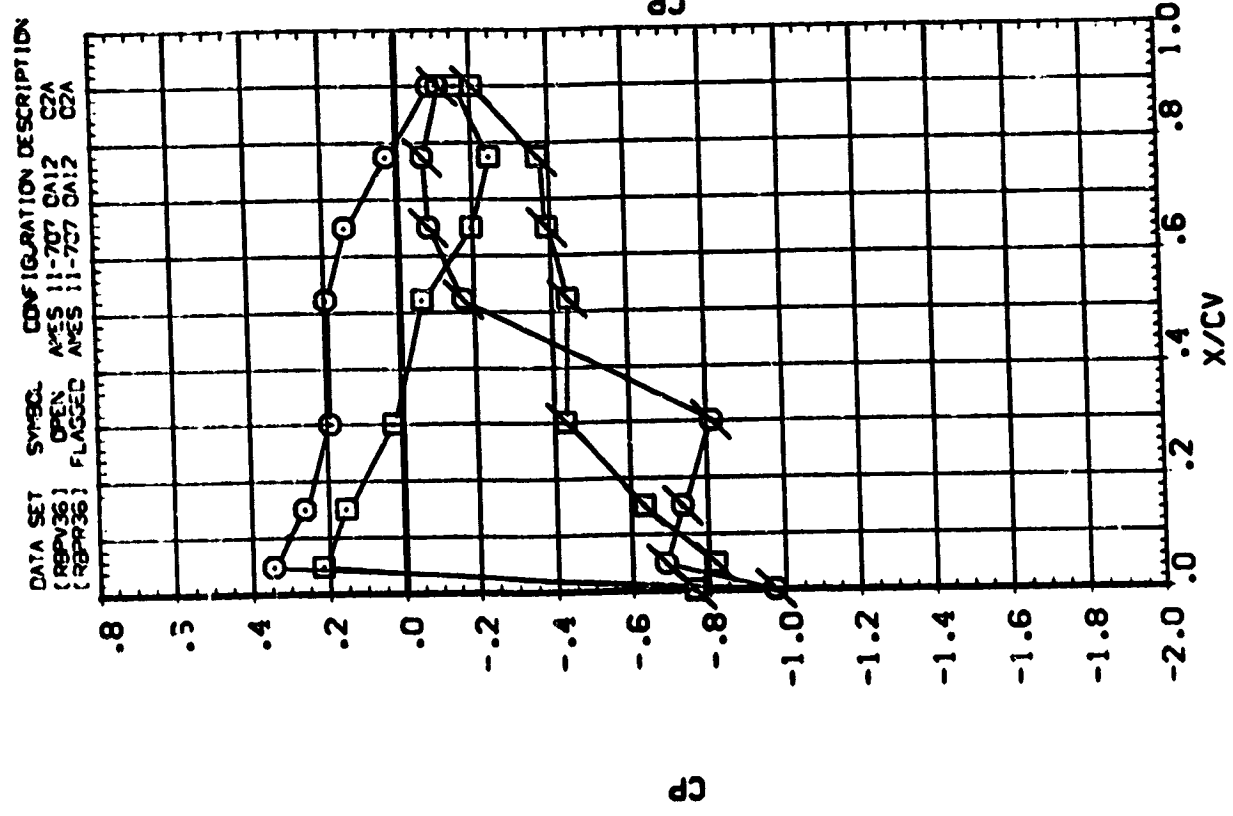
ALPHA
 ELEVON

SYMBOL Z/BV BETA MACH
 .158 -8.070 .598
 .316 -3.990
 .600



PARAMETRIC VALUES
 ALPHA 10.000 2.000 40.000
 ELEVON 1.000 2.000 40.000

SYMBOL Z/BV BETA MACH
 .84C -8.070 .598
 .925 -3.950

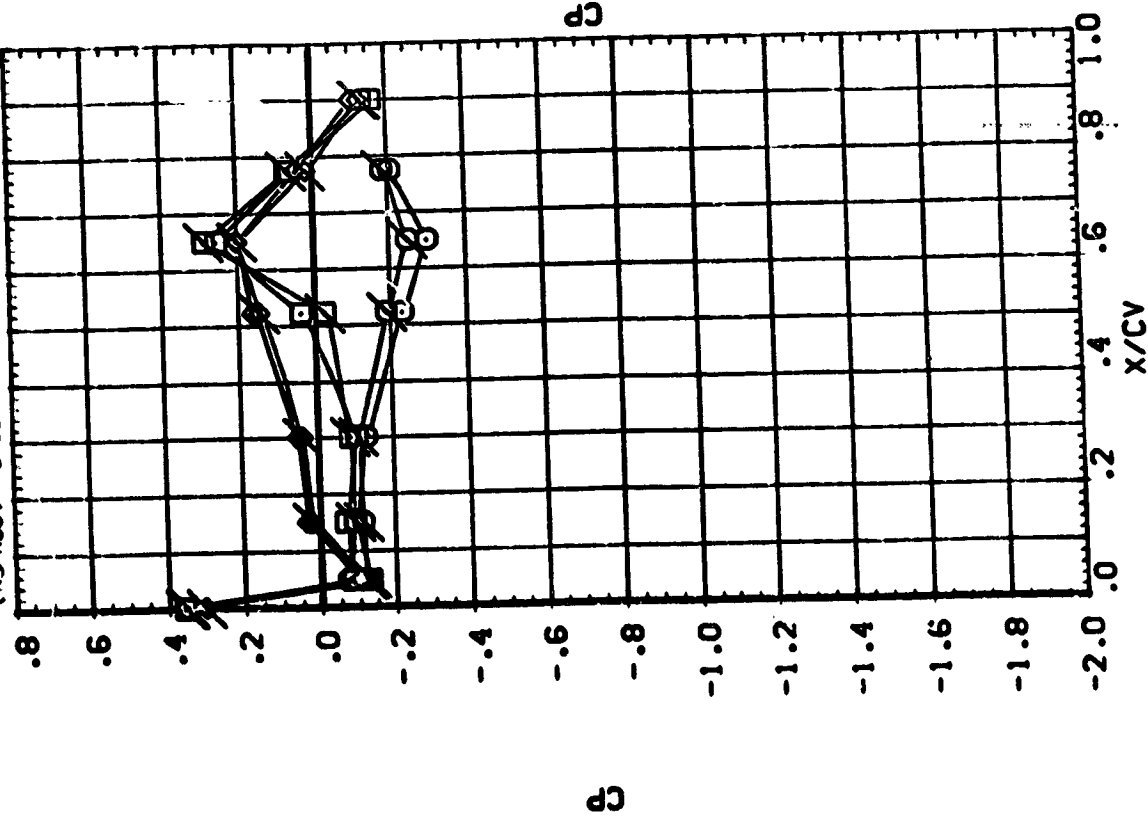


CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

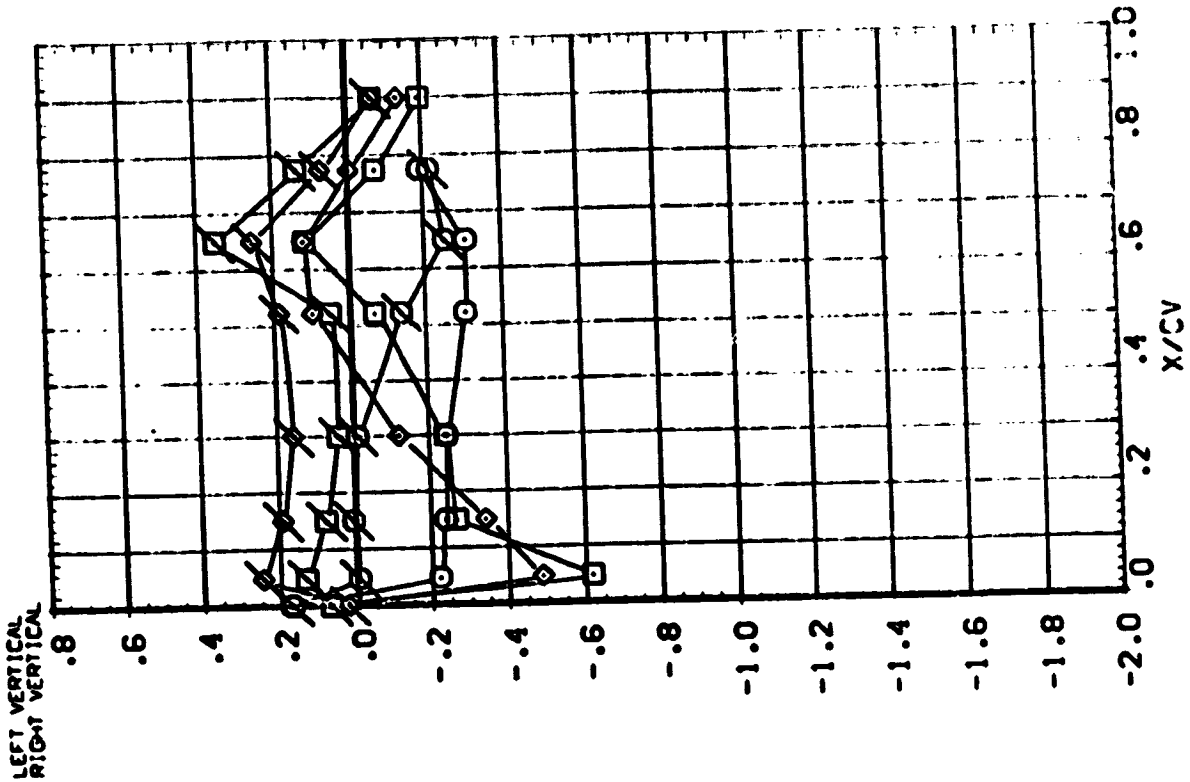


SY-8C- Z/3N BETA MACH
 .158 .080 .598
 .316 4.160
 .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RSPV36) OPEN APES 11-707 DA12 C2A
 (RSPV36) FLAGGED APES 11-707 CA:2 C2A



PARAMETRIC VALUES
 ALPHA 10.000 RUDDER 10.000
 ELEVON .000 RUDDER 40.000

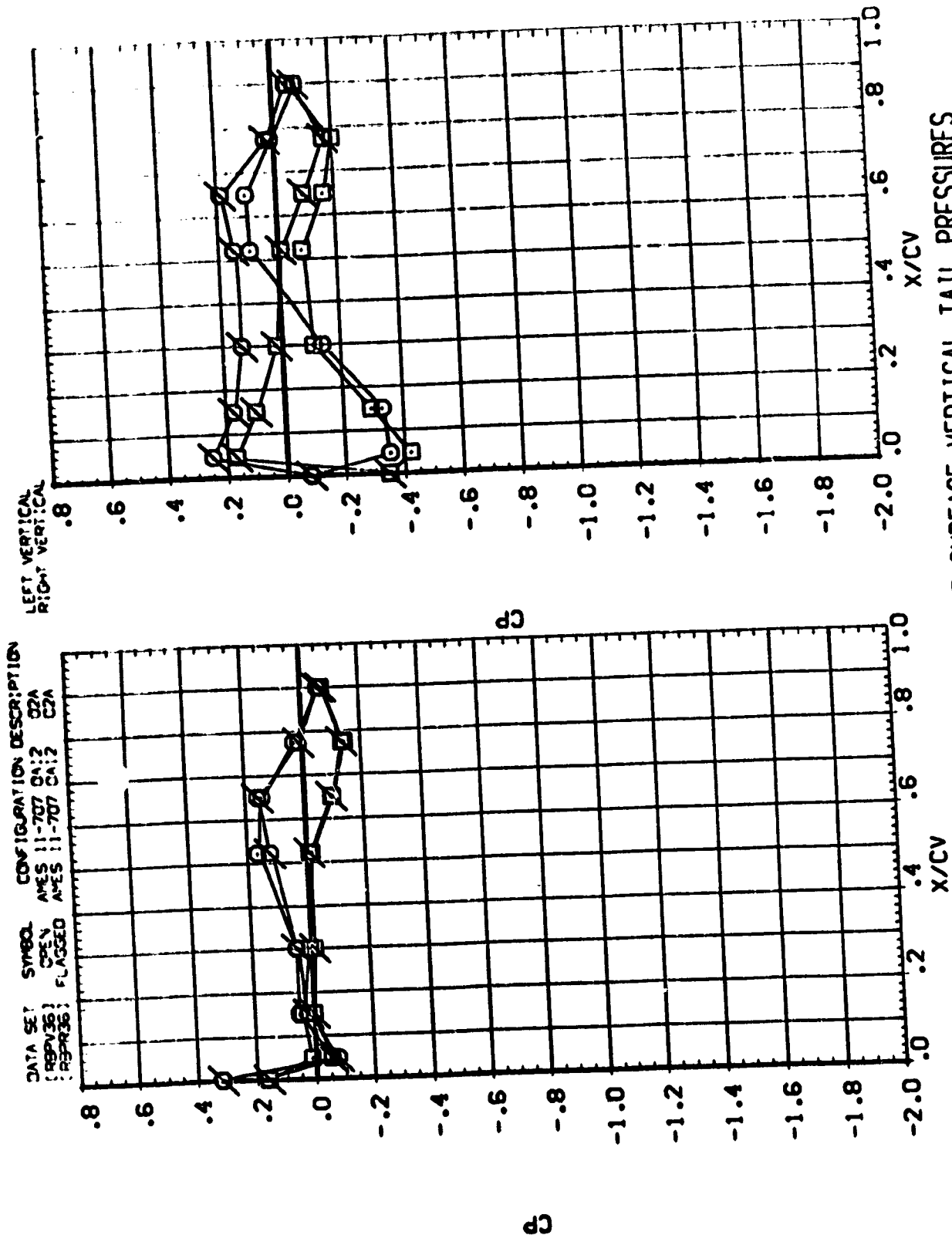


CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES



SVGC Z/B/ β TA MACH
.840 .080 .598
.925 4.160

PARAMETRIC VALUES
ALPHA
ELEVON
0.000 0.000 0.000
0.000 0.000 0.000
0.000 0.000 0.000





SYMBOL Z/BV .158 .316 .600

BETA 8.230

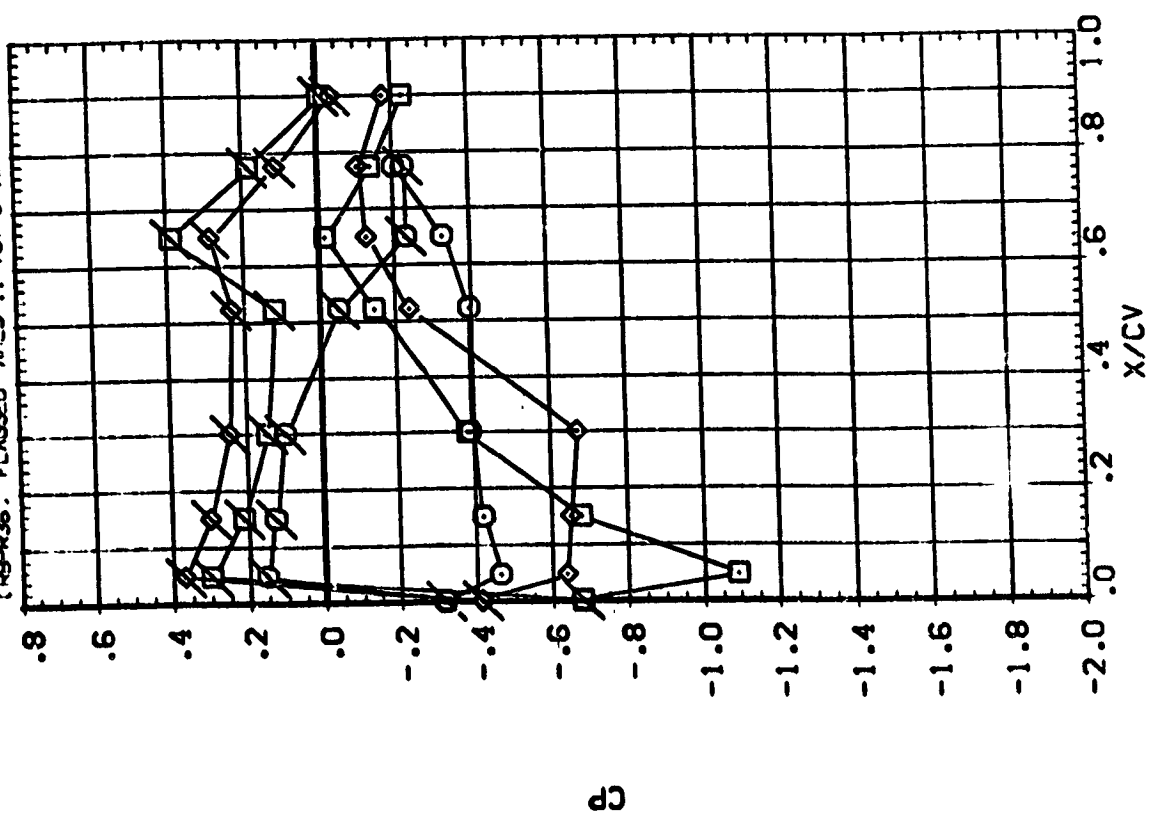
MACH .598

PARAMETRIC VALUES
10.000
RUEER
RUEFLR

ALPHA
ELEVON

DATA SET SYMBOL CONFIGURATION DESCRIPTION
(RSPV36) OPEN AMES 11-707 OA12 C2A
(RSPV36) FLAGGED AMES 11-707 OA12 C2A

LEFT VERTICAL
RIGHT VERTICAL



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

ALPHA
ELEVON

10.000
.000

RUDDER
RUDDER

40.000
.000

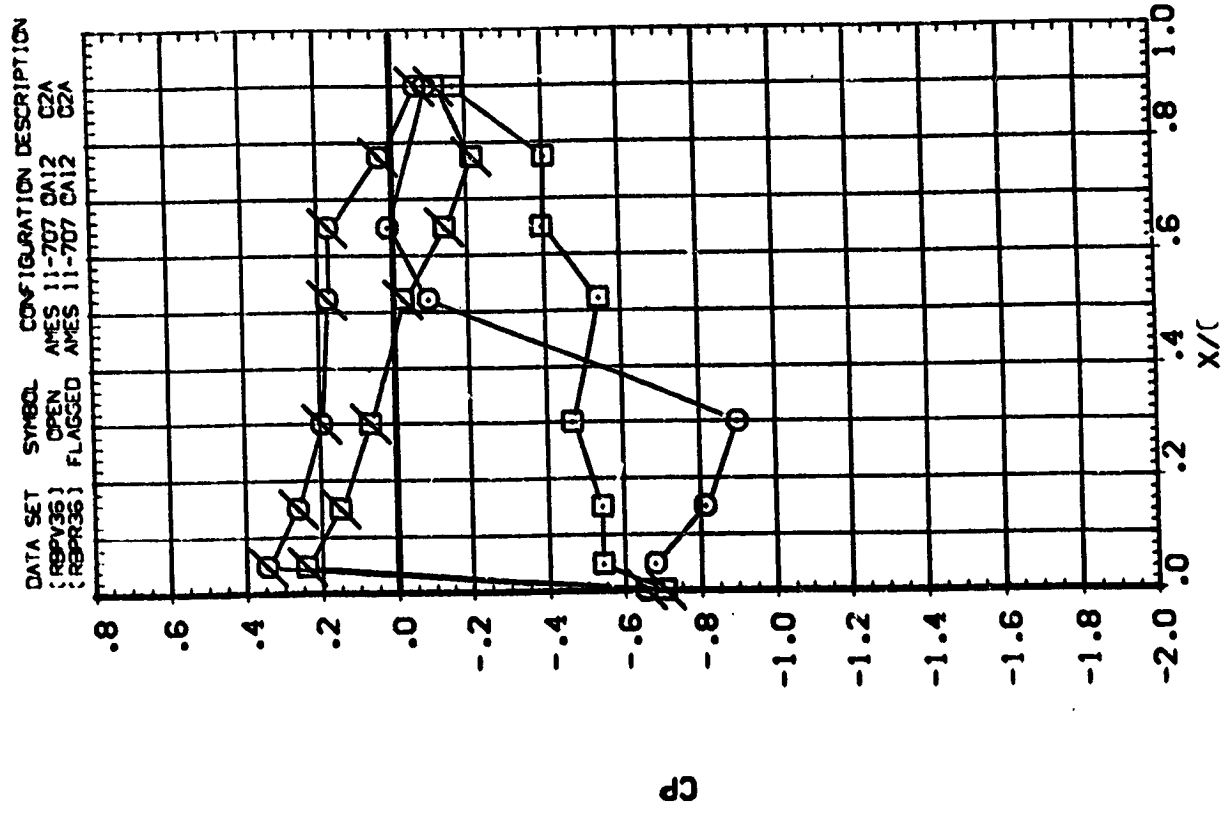
BETA
8.230

MACH
.598

Z/BV
.840
.925

SYMBOL
□ □

LEFT VERTICAL
RIGHT VERTICAL



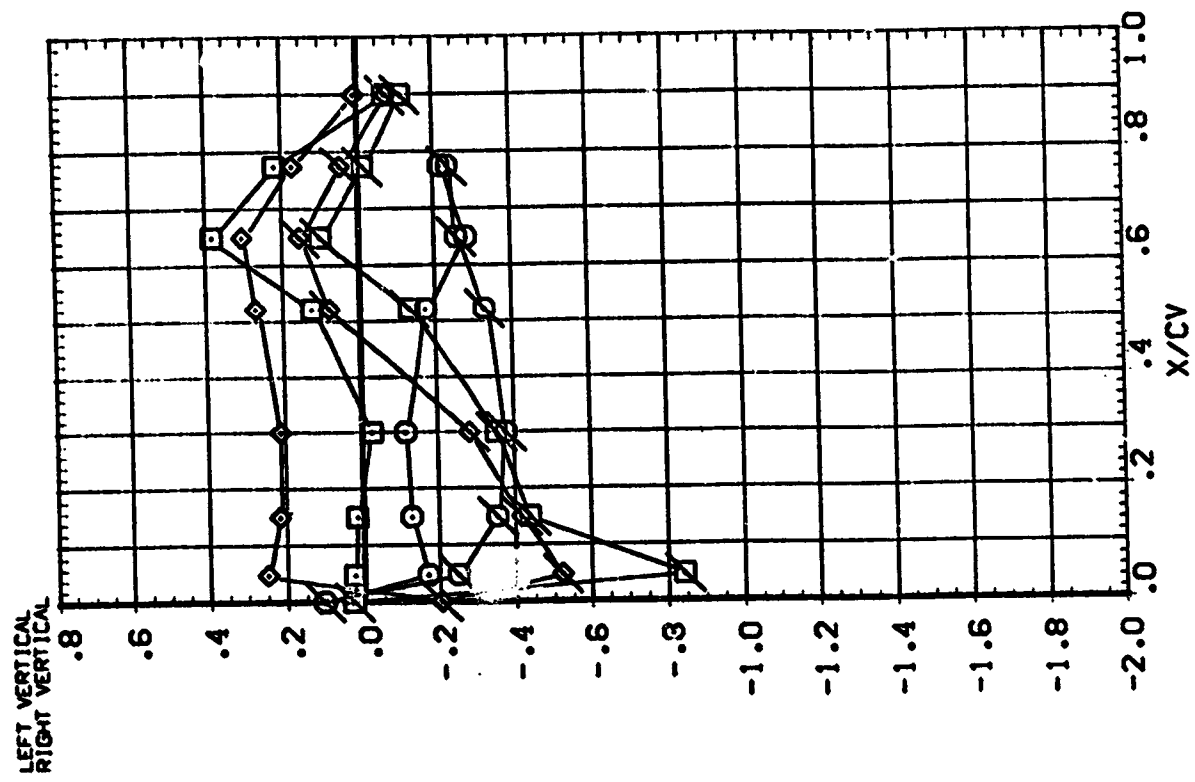
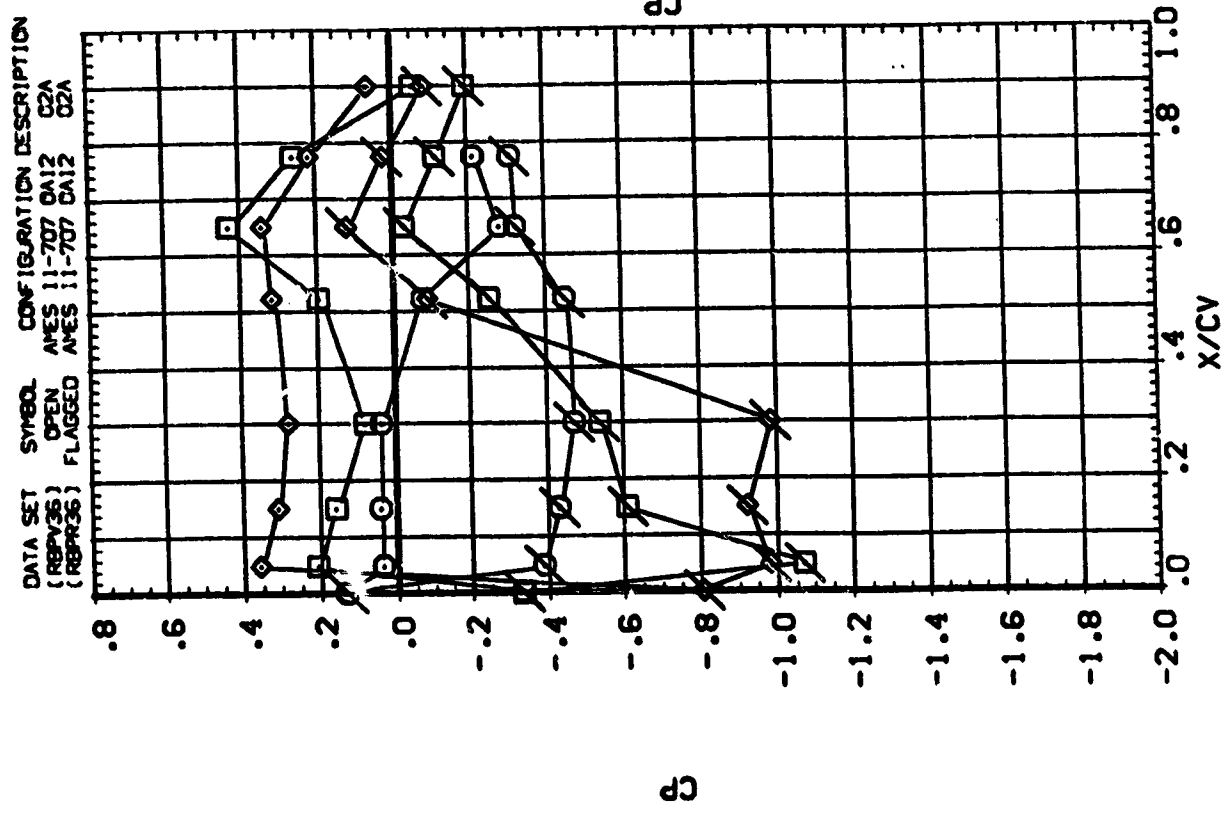
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 10.000 R.ODER .000
 40.000 R.DFLR

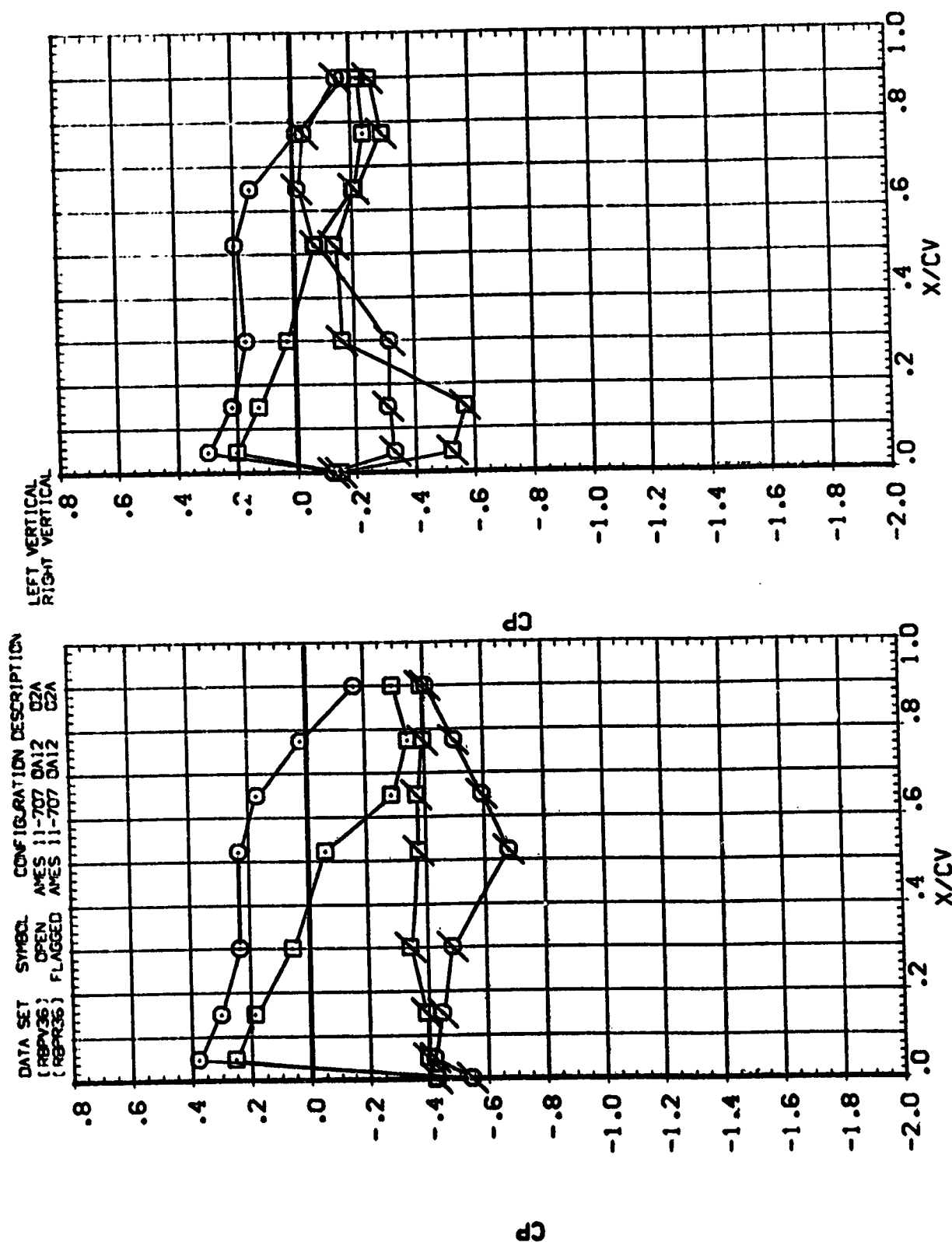
ALPHA
 ELEVON

BETA MACH
 -8.170 .903
 -4.050

SYMBOL Z/BN
 .158
 .316
 .600



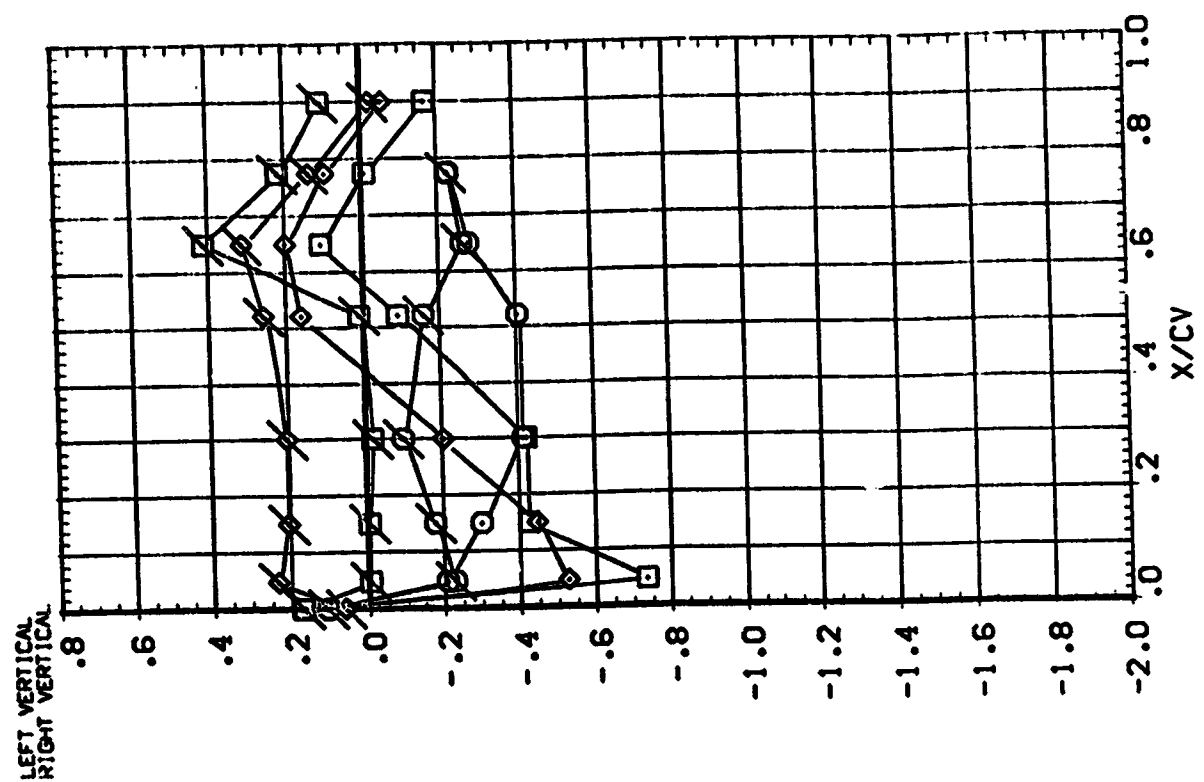
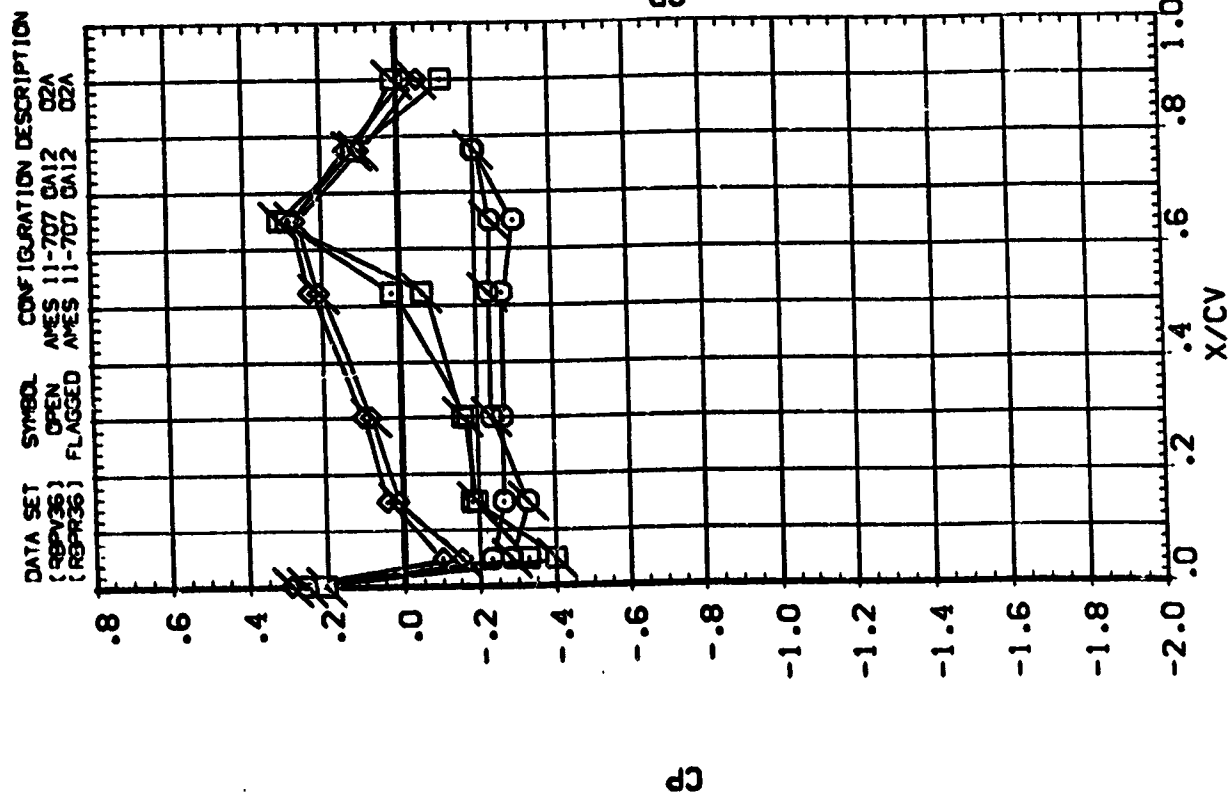
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

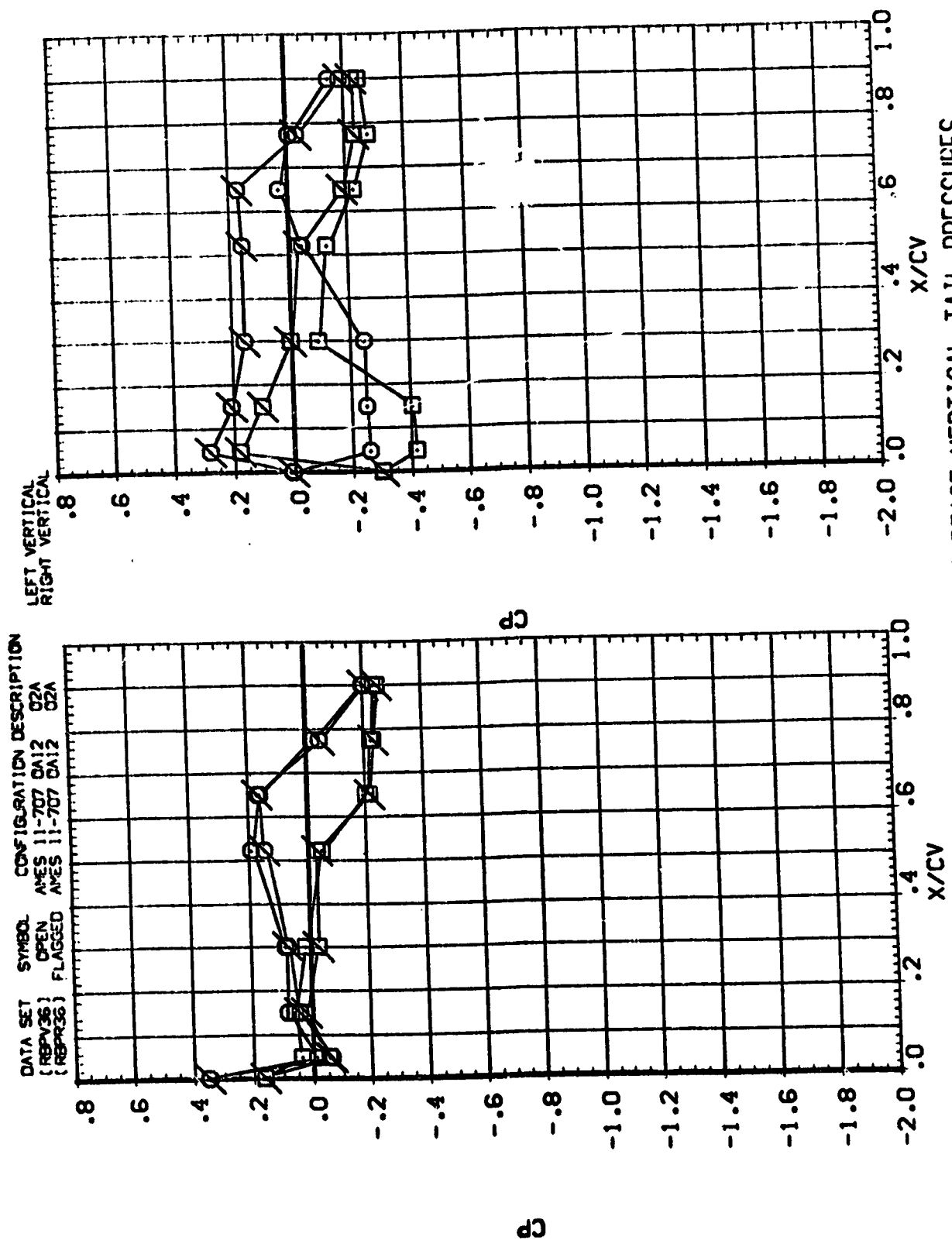
PARAMETRIC VALUES
 ALPHA 10.000 RUMER 40.000
 ELEVON .000 RUMFLR

SYMBOL Z/BV BETA MACH
 .158 .080 .903
 .316 4.200
 .600



SYMBOL Z/BN BETA MACH
 .840 .080 .503
 .925 4.200

ALPHA ELEVON
 :0.000 :0.000
 RUDFLR 40.000



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES



SYMBOL
○ □ ◇

Z/BV
.158
.316
.600

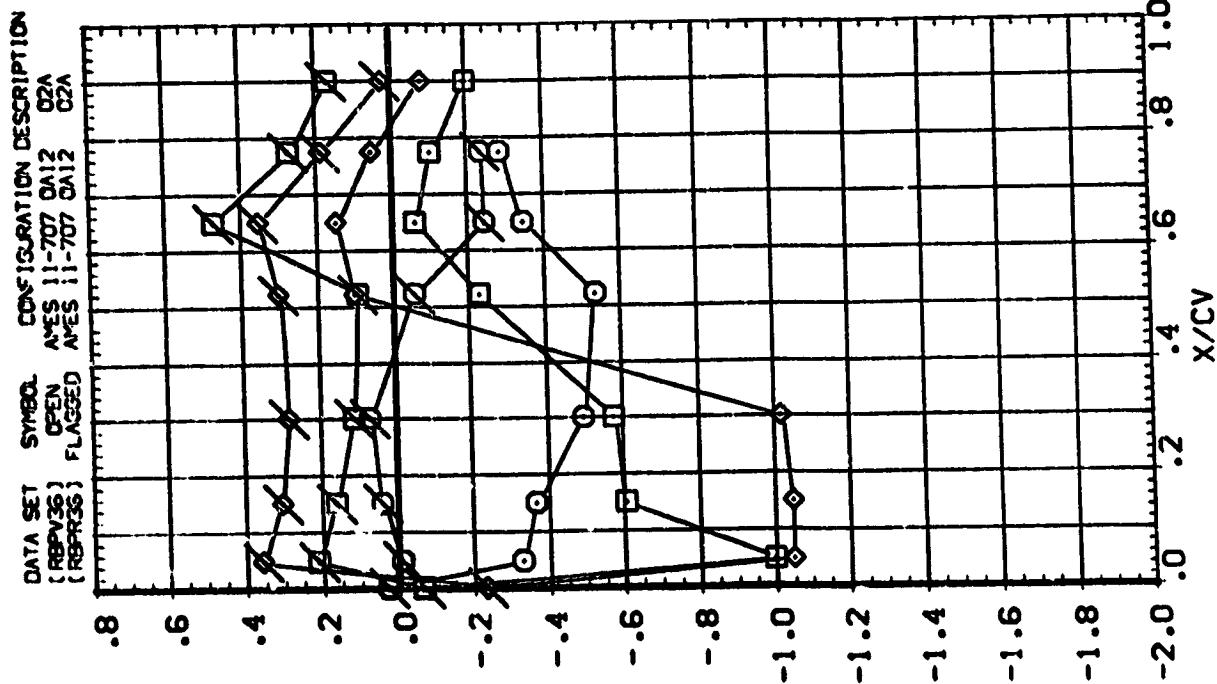
BETA
9.300

MACH
.903

PARAMETRIC VALUES
10.000 RUDDER
.000 RUDFLR

ALPHA
ELEVON

.000
40.000



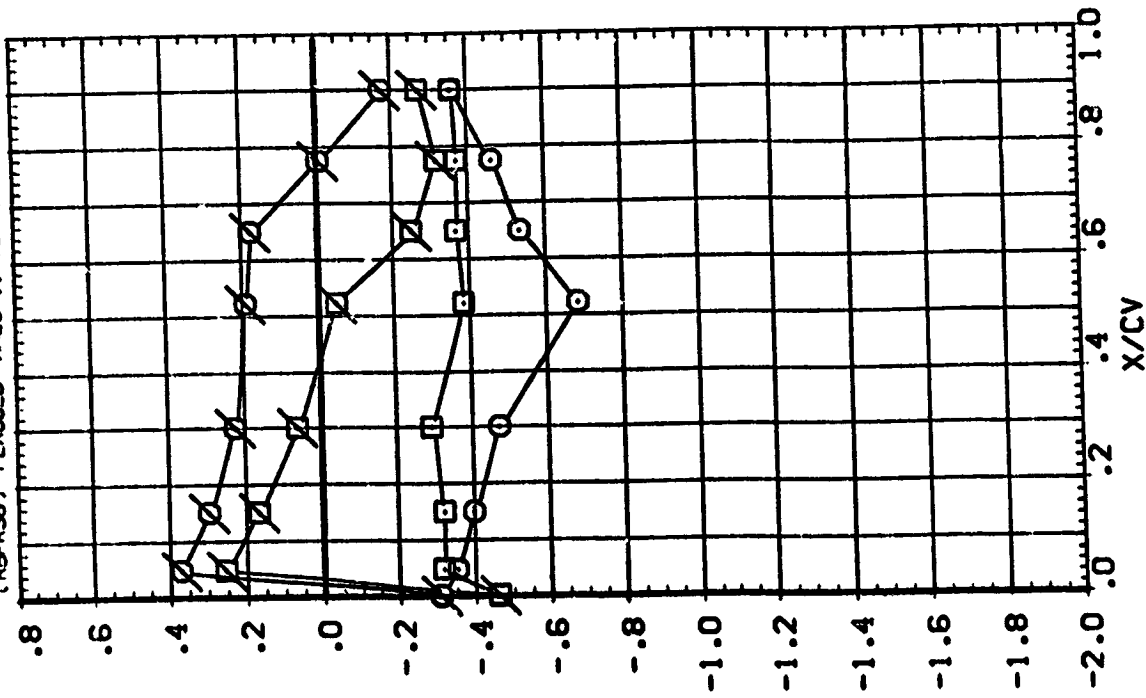
PARAMETRIC VALUES
 10.000 RLODER .000
 .000 RLOFLR 40.000

ALPHA
 ELEVON

SYMBOL Z/BV BETA MACH
 .840 8.330 .903
 .925

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RBPV36) OPEN AMES 11-707 OA12 O2A
 (RBPV36) FLAGGED AMES 11-707 OA12 O2A

LEFT VERTICAL
 RIGHT VERTICAL



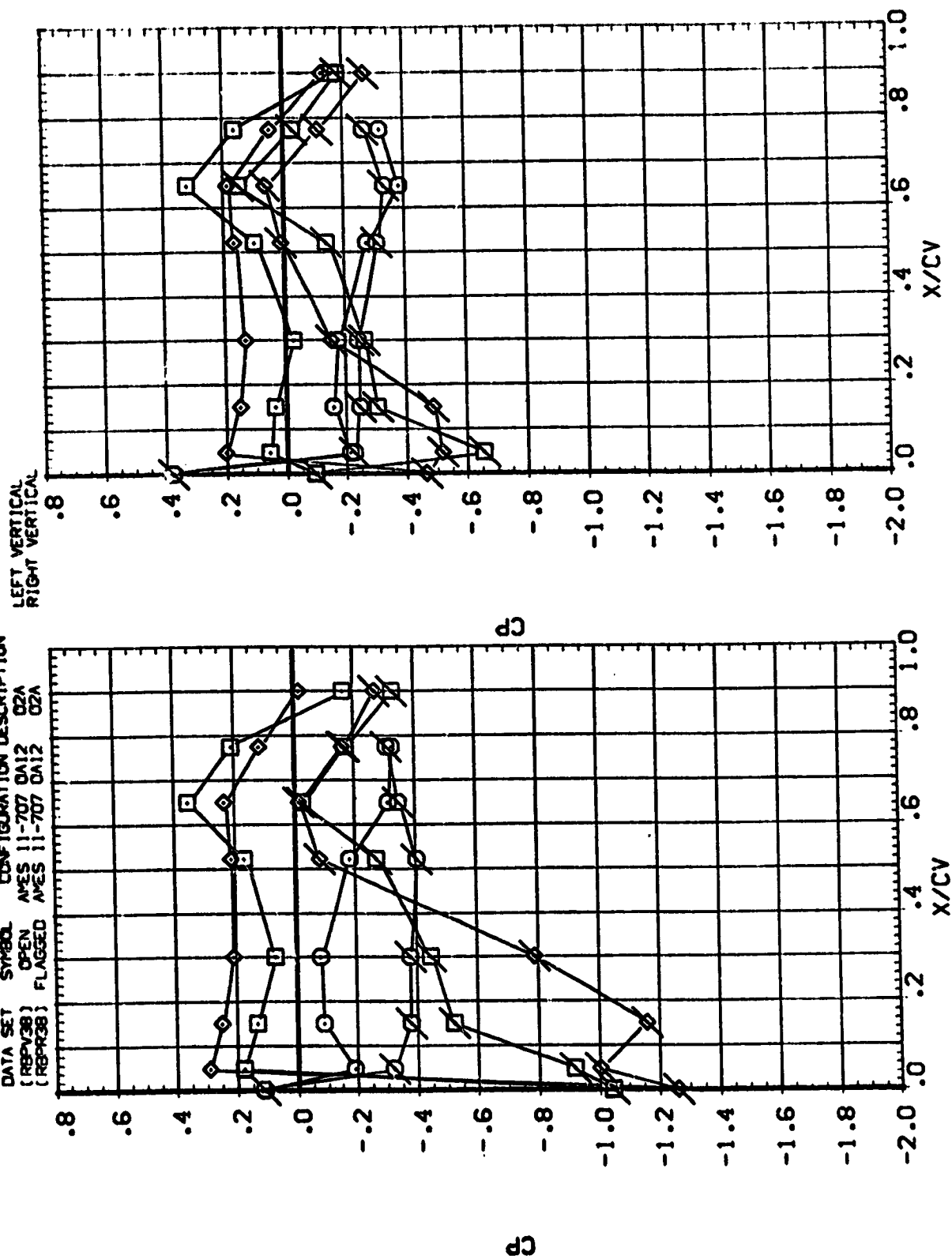
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

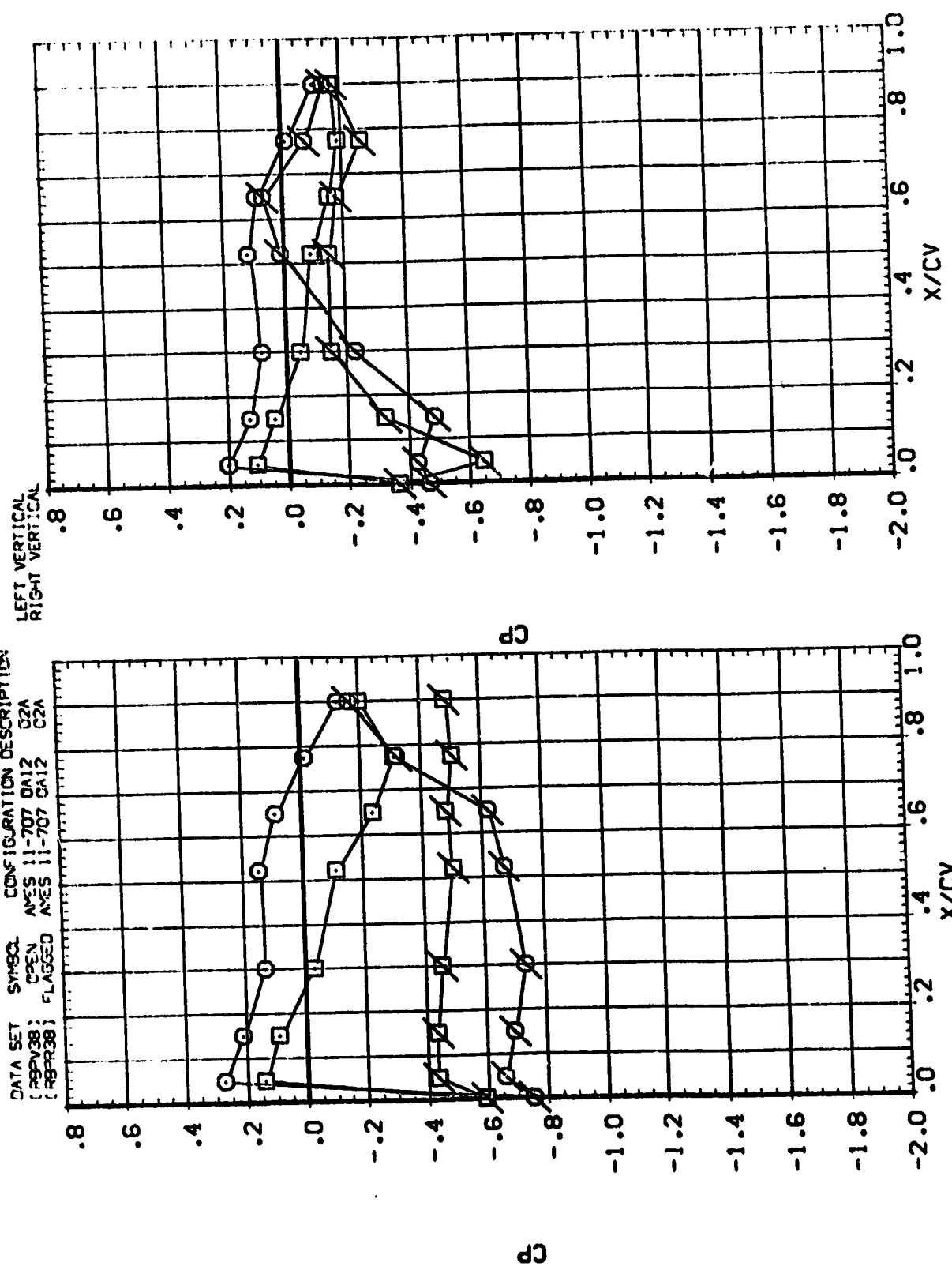


SYMBOL Z/BV BETA MACH
○ .158
□ .316
◇ .600

PARAMETRIC VALUES
ALPHA 20.000 RUDDER .000
ELEVON .000 RUOFLR 40.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
(RBPV38) OPEN APES 11-707 DA12 O2A
(RBPV38) FLAGGED APES 11-707 DA12 O2A





CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES



SYMBOL
□
○
◇

Z/BN
.158
.316
.600

BETA
.080
4.150

MACH
.599

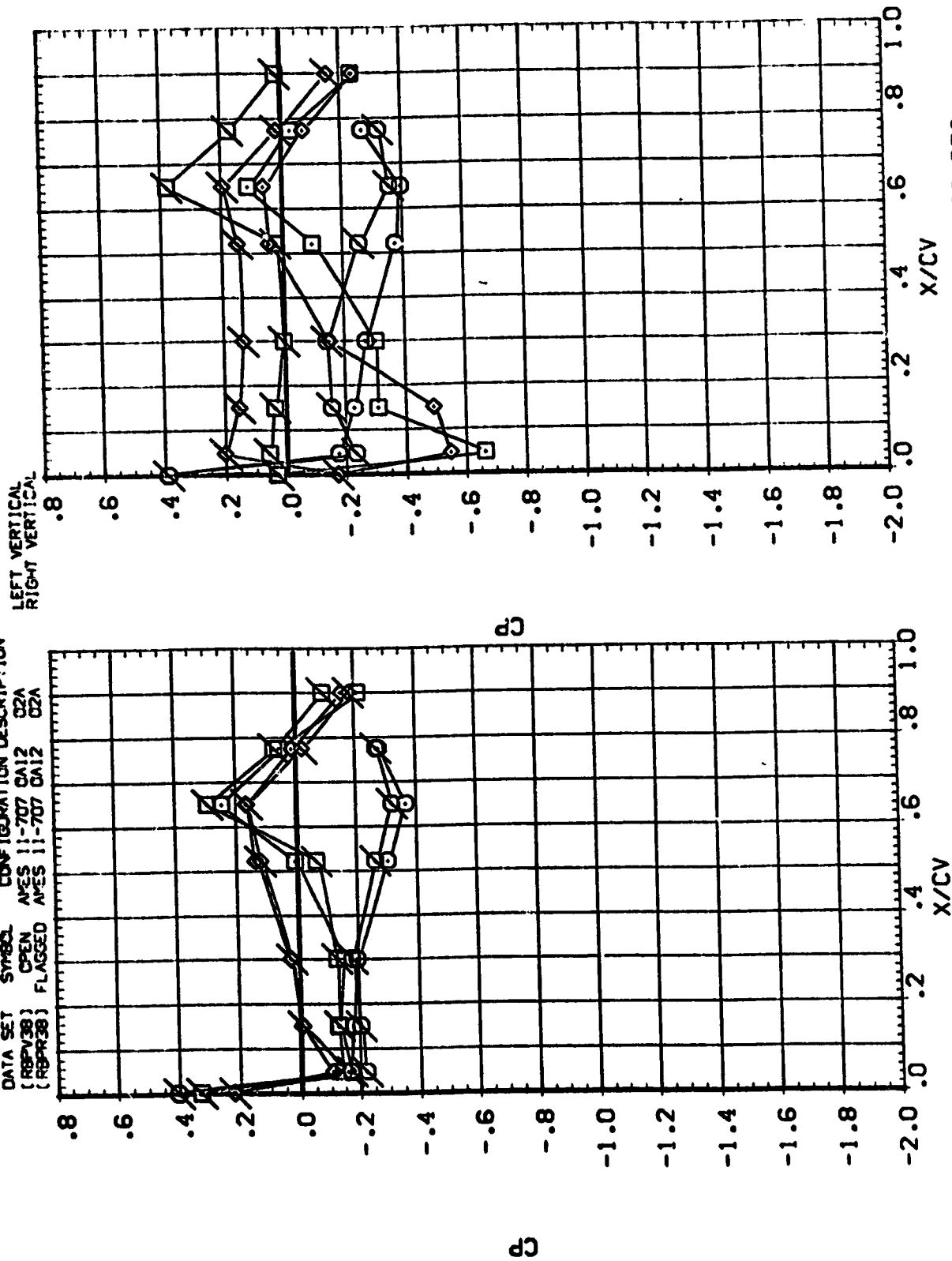
PARAMETRIC VALUES
ALPHA
ELEVON

20.000
.000

RUDDER
RUDEFLR

.000
40.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
(RBPV38) OPEN APES 11-707 OA12 O2A
(RBPV38) FLAGGED APES 11-707 OA12 O2A

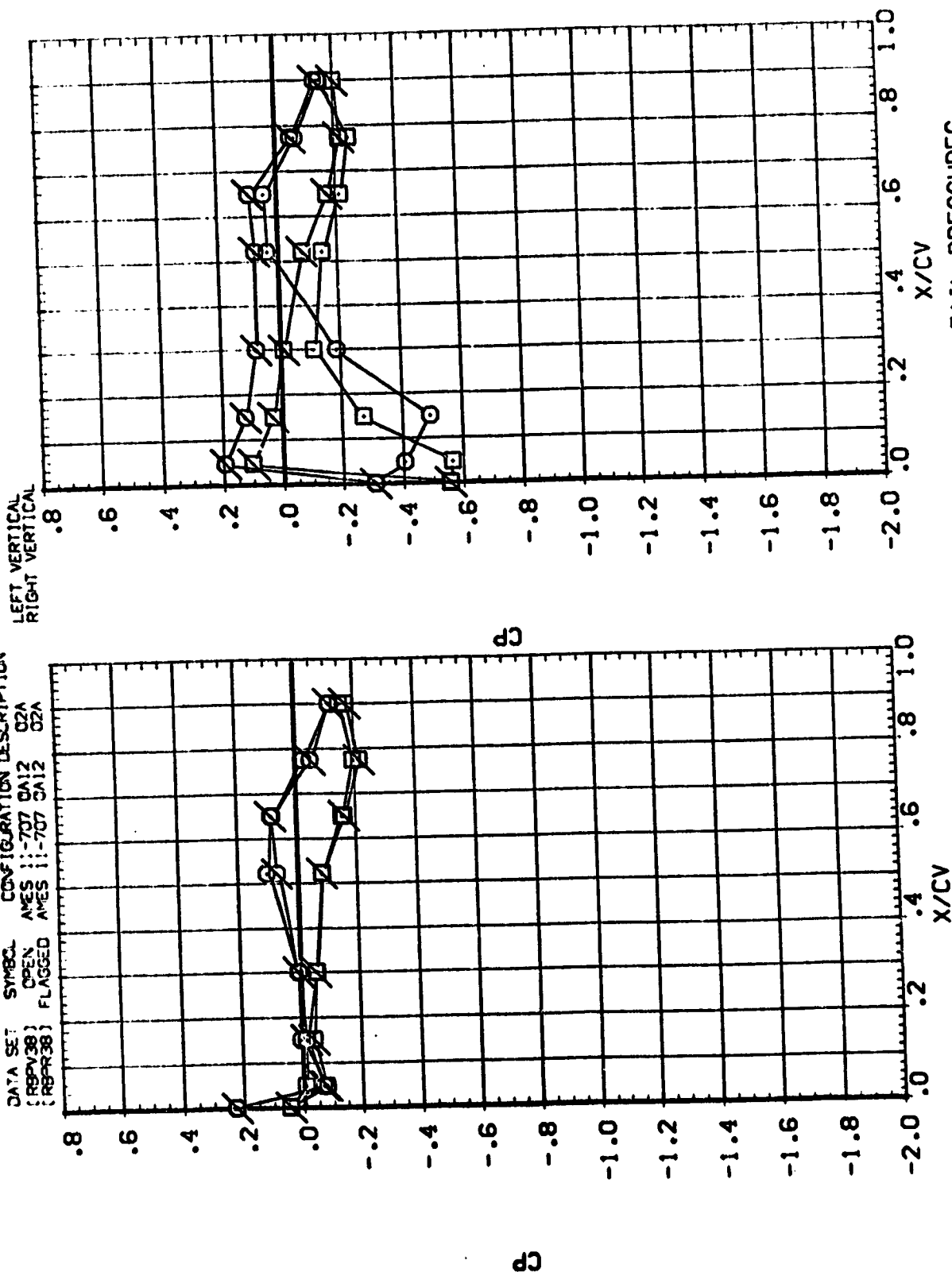


CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 ALPHA 20.000 RUDDER .000
 ELEVON .000 RUSFLR 40.000

SYMBOL Z/BV BETA MACH
 .84C .080 .599
 .925 4.190

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RBPV38) OPEN AMES 11-707 OA12 Q2A
 (RBPV38) FLAGGED AMES 11-707 CA12 Q2A



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

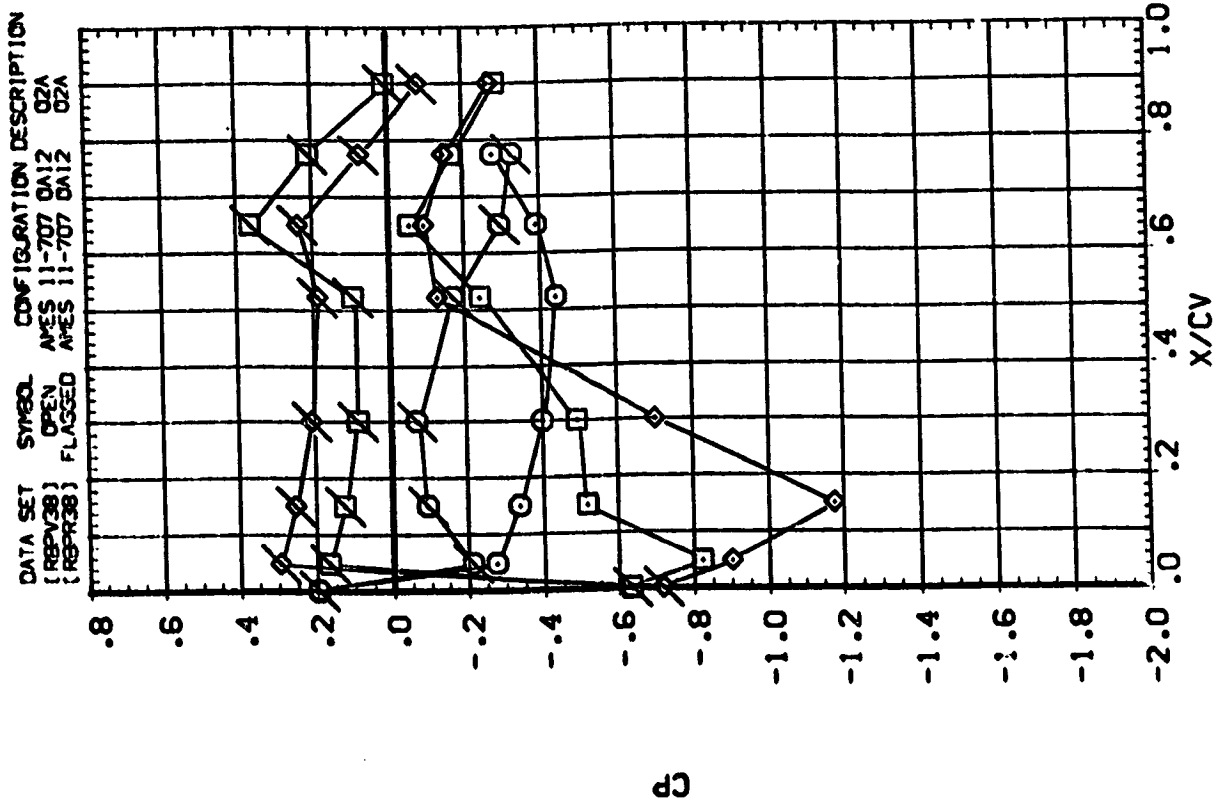


PARAMETRIC VALUES
20.000 RUDDER .000
.000 RUDDER 40.000

ALPHA
ELEVON

SYMBOL Z/BV BETA MACH
○ .158 8.300 .599
□ .316
◇ .600

LEFT VERTICAL
RIGHT VERTICAL



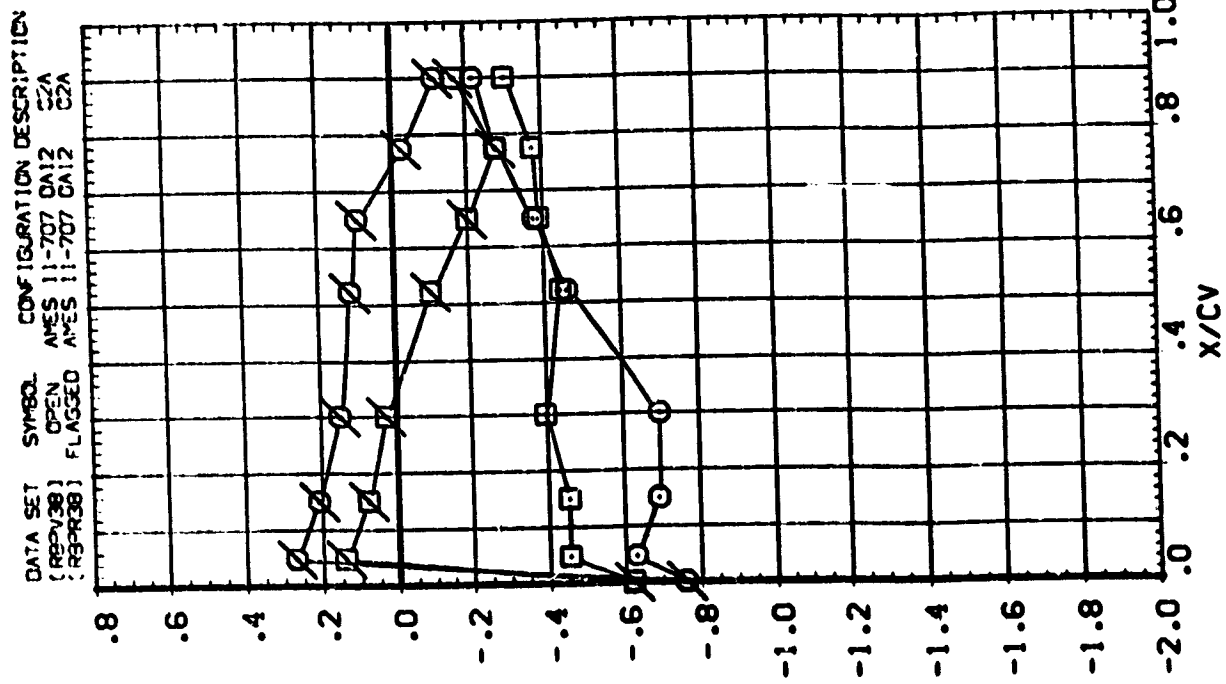
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETER VALUES
 NO. 0000 000000
 0000 000000
 0000 000000

ALPHA
 ELEVATION

SYMBOL Z/BV BETA WAC
 .842 8.300 .599
 .925

LEFT VERTICAL
 RIGHT VERTICAL



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES

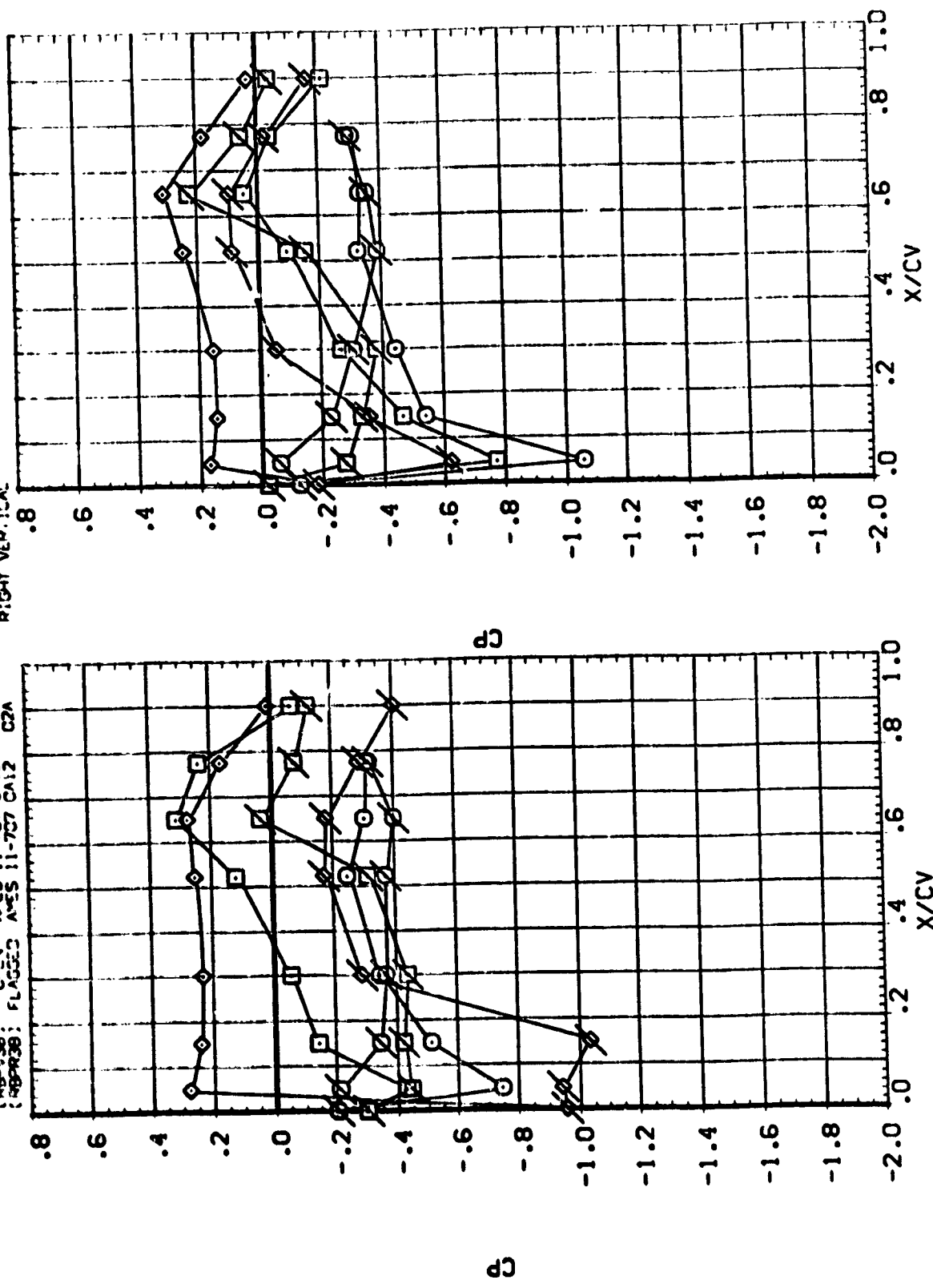
ALPHA	20.000	RJZER	.000
ELEVON	.000	RJFLR	40.000

SYNCC. 2/8V BETA "ACH" .SC:

.150	-8.08C	
.316	-3.99C	
.600		

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RBPV38)	CPEN	AMES 11-707 CA12	C2A
(RBPV38)	FLAGED	AMES 11-707 CA12	C2A



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

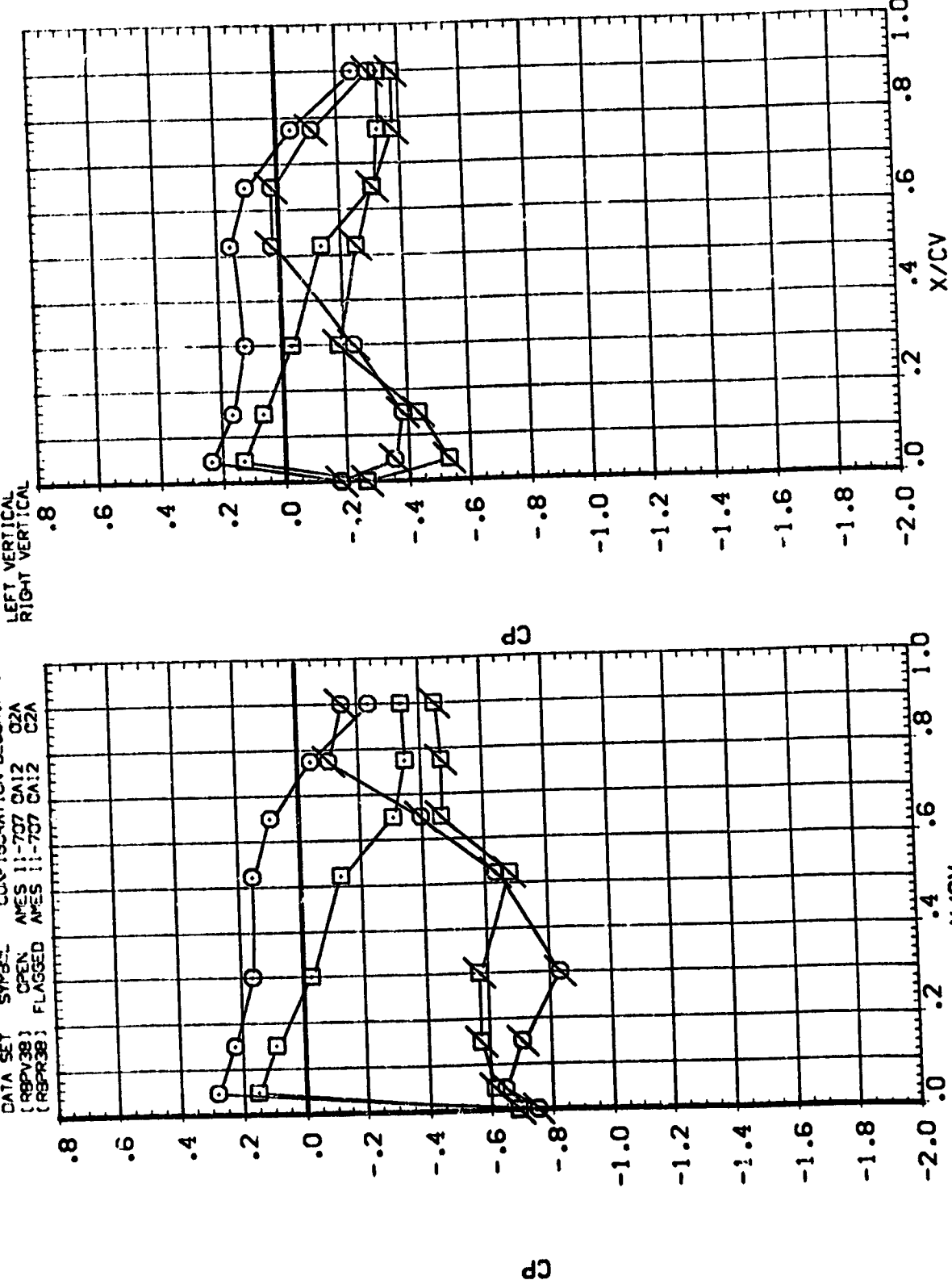
0.00

0.00
0.00
-3.99C

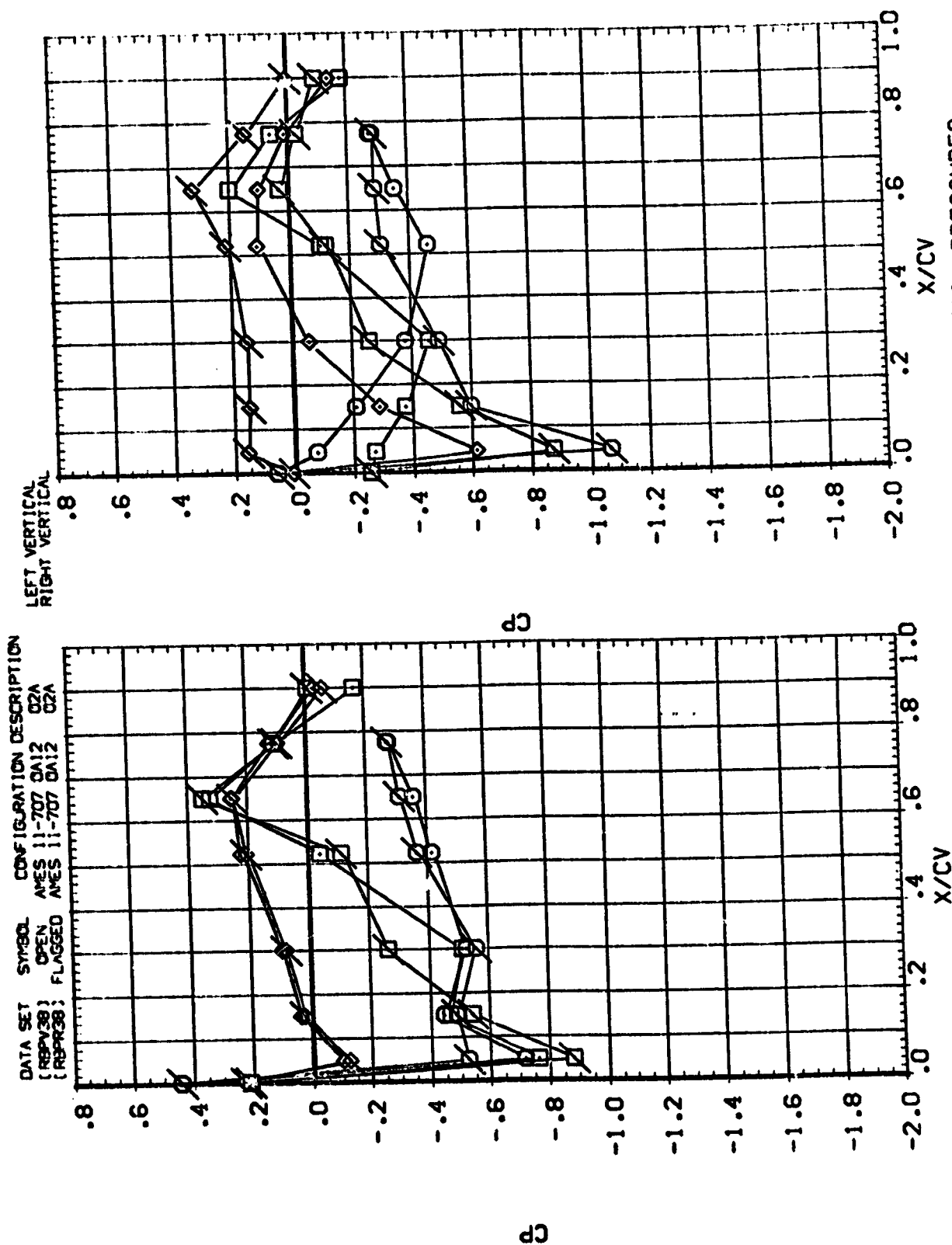
0.00

DATA SET SYMBO. CONFIGURATION DESCRIPTION

(RBPV38) OPEN AMES 11-707 CA12 O2A
(RBPV38) FLAGGED AMES 11-707 CA12 C2A



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

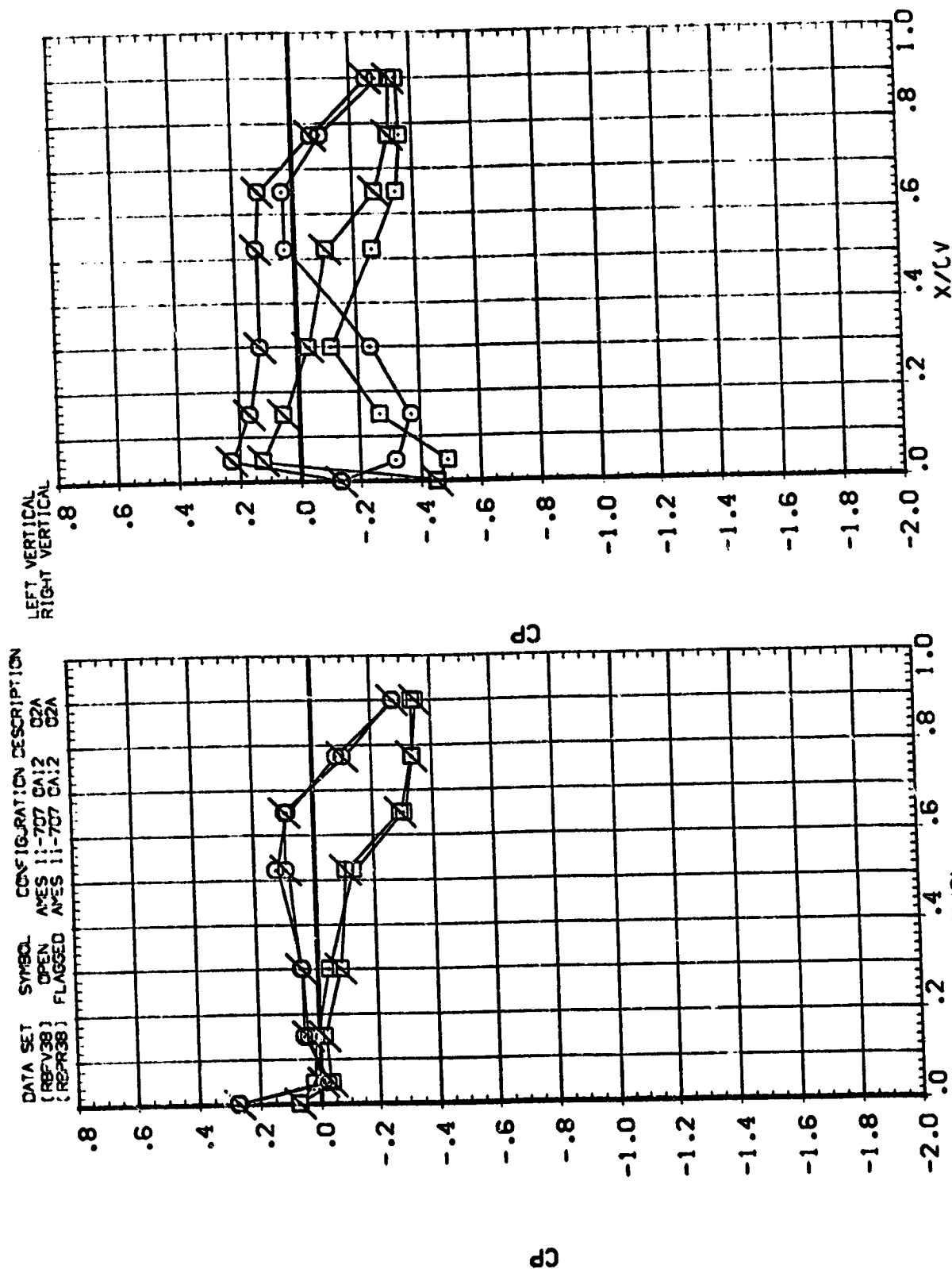




SYMBOL Z/3V BETA MACH
○ .84C .080 .901
□ .925 4.220

PARAMETRIC VALUES
ALPHA 20.000 RUDDER .000
ELEVON .000 RUDEFUR 40.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
(RBFV38) OPEN AXES 11-707 CA12 02A
(R2PR38) FLAGGED AXES 11-707 CA12 02A



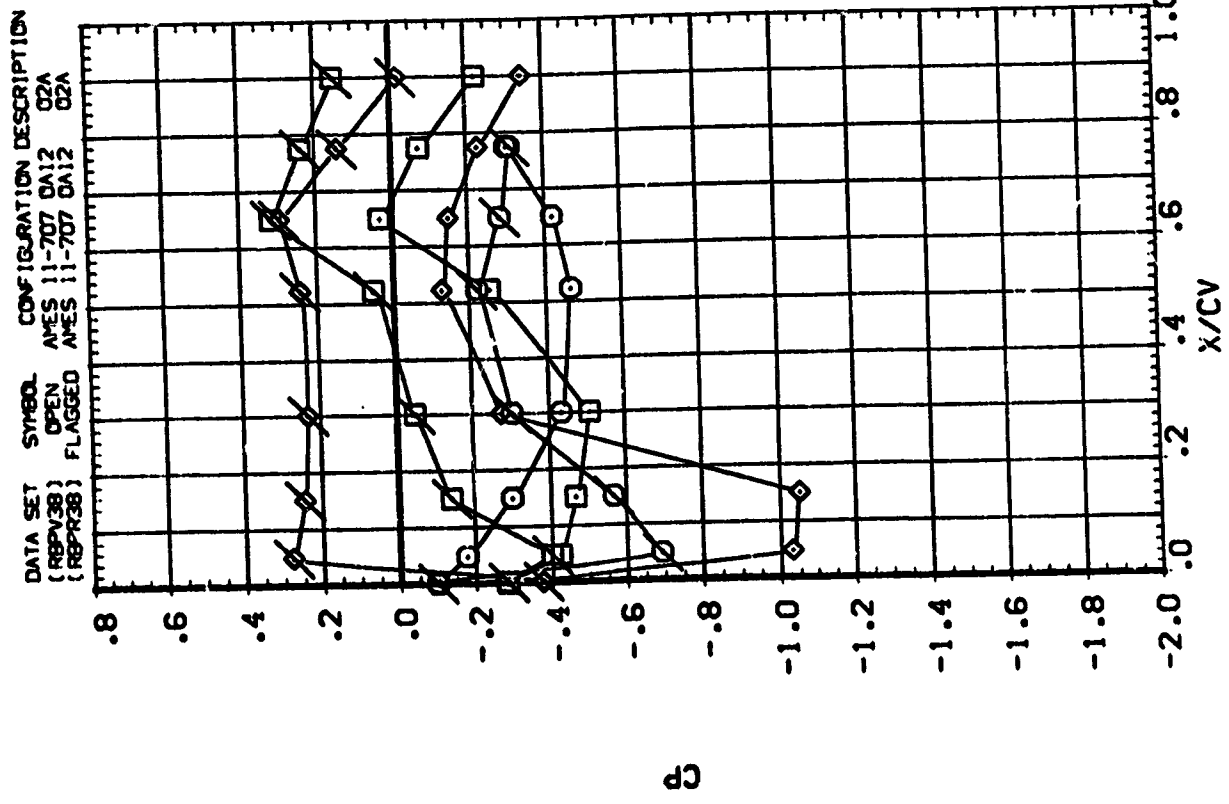
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 20.000 RUDER .000
 .000 RUFLR 40.000

ALPHA
 ELEVON

SYMBOL Z/BV BETA MACH
 .158 8.360 .901
 .316
 .600

LEFT VERTICAL
 RIGHT VERTICAL



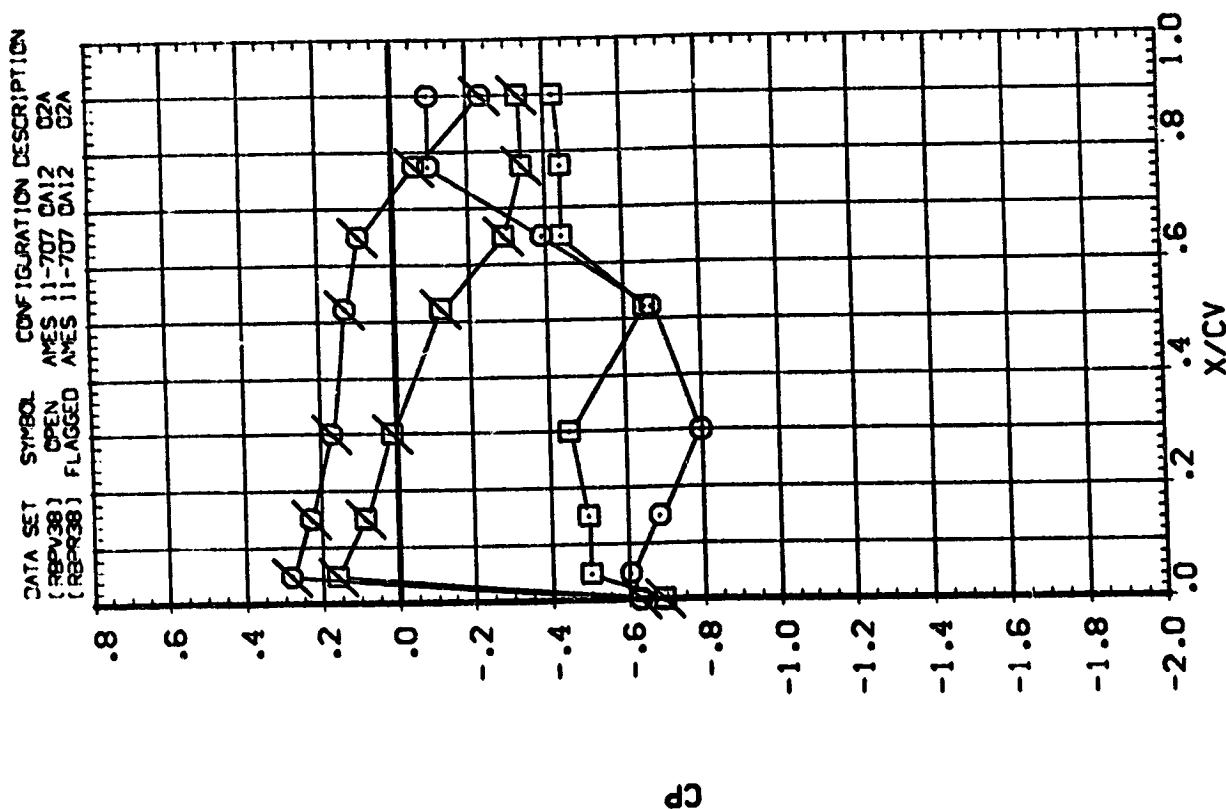
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 20.000 RCDER .000
 .000 RCDFLR 40.000

ALPHA
 ELEVON

SYMBOL Z/3V BETA MACH
 .84C .360 .901
 .925

LEFT VERTICAL
 RIGHT VERTICAL

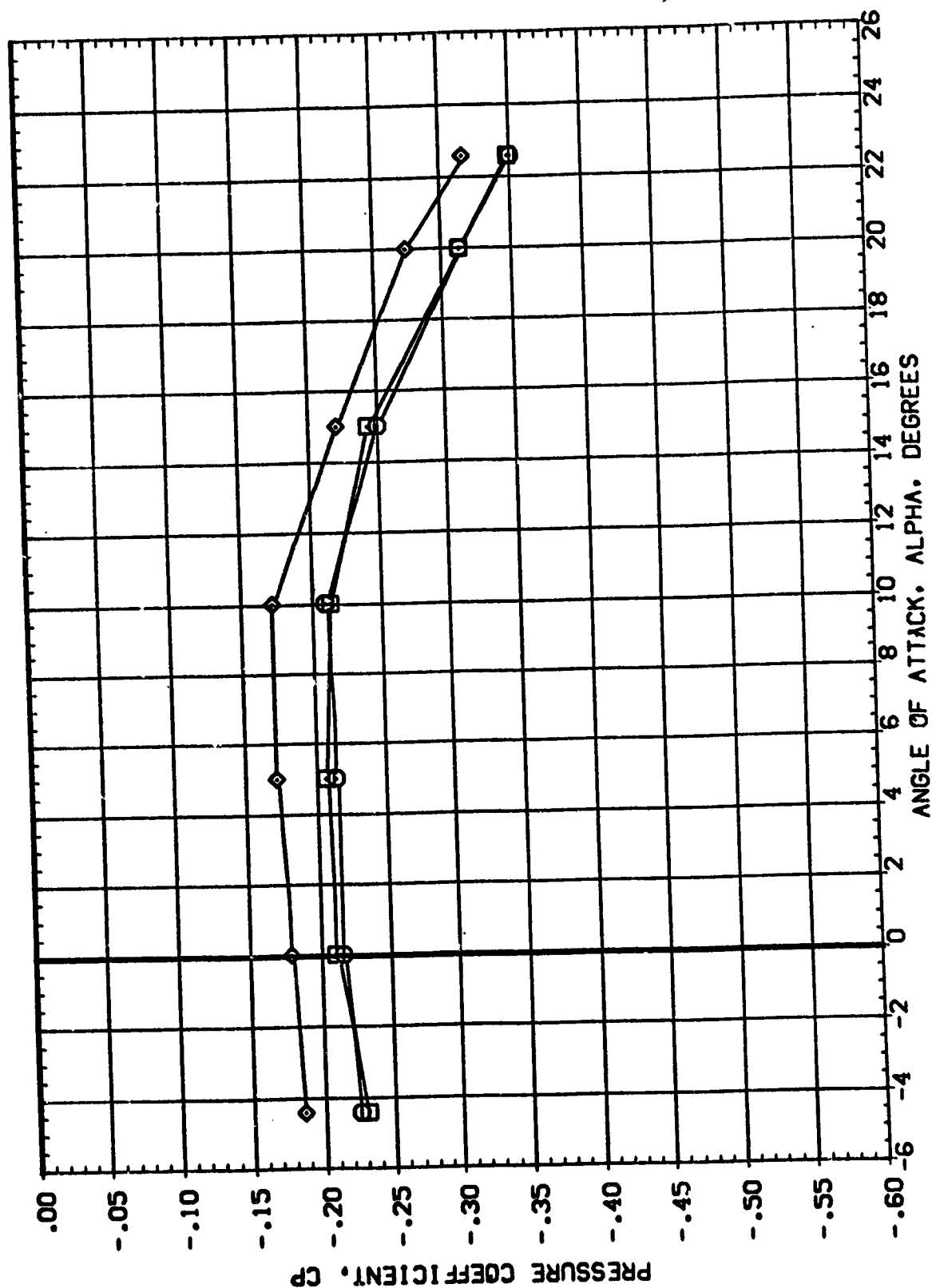


(RBPC01)

ORBITER BASE

AMES 11-707 0A12 02A

TAP NO		A		MACH		PARAMETRIC VALUES			
						BETA	ELEVON	RUDER	RUDFLR
						.000	.000	.000	.000
SYMBOL	7.000								
	8.000								
	9.000								



ORBITER BASE PRESSURES

(RBPCD1)

ORBITER BASE

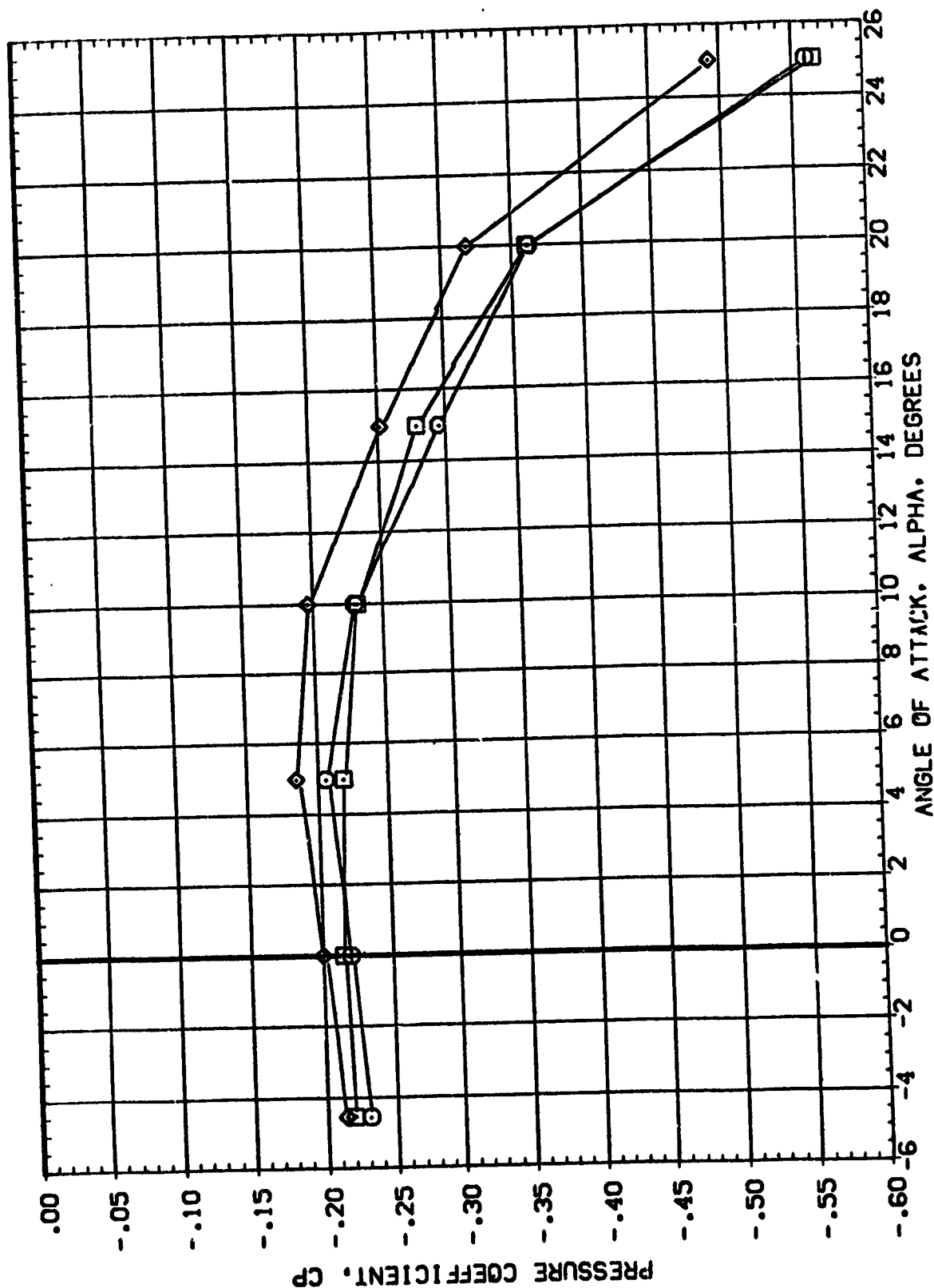
AMES 11-707 0A12 02A

SYMBOL
□
□
◇

TAP NO
7.000
8.000
9.000

A MACH
.000 .905

PARAMETRIC VALUES
BETA .000
ELEVON .000
RUDDER .000
RUOFLR .000



ORBITER BASE PRESSURES

(RBPC01)

ORBITER BASE

02A

AMES 11-707 0A12

SYMBOL

TAP NO

A

MACH

02A

ORBITER BASE

(RBPC01)

ORBITER BASE

BETA

ELEVON

PARAMETRIC VALUES

RUDER

RUDFLR

.000

.000

.000

12.000

13.000

14.000

.000

.000

.000

.000

.000

.000

.000

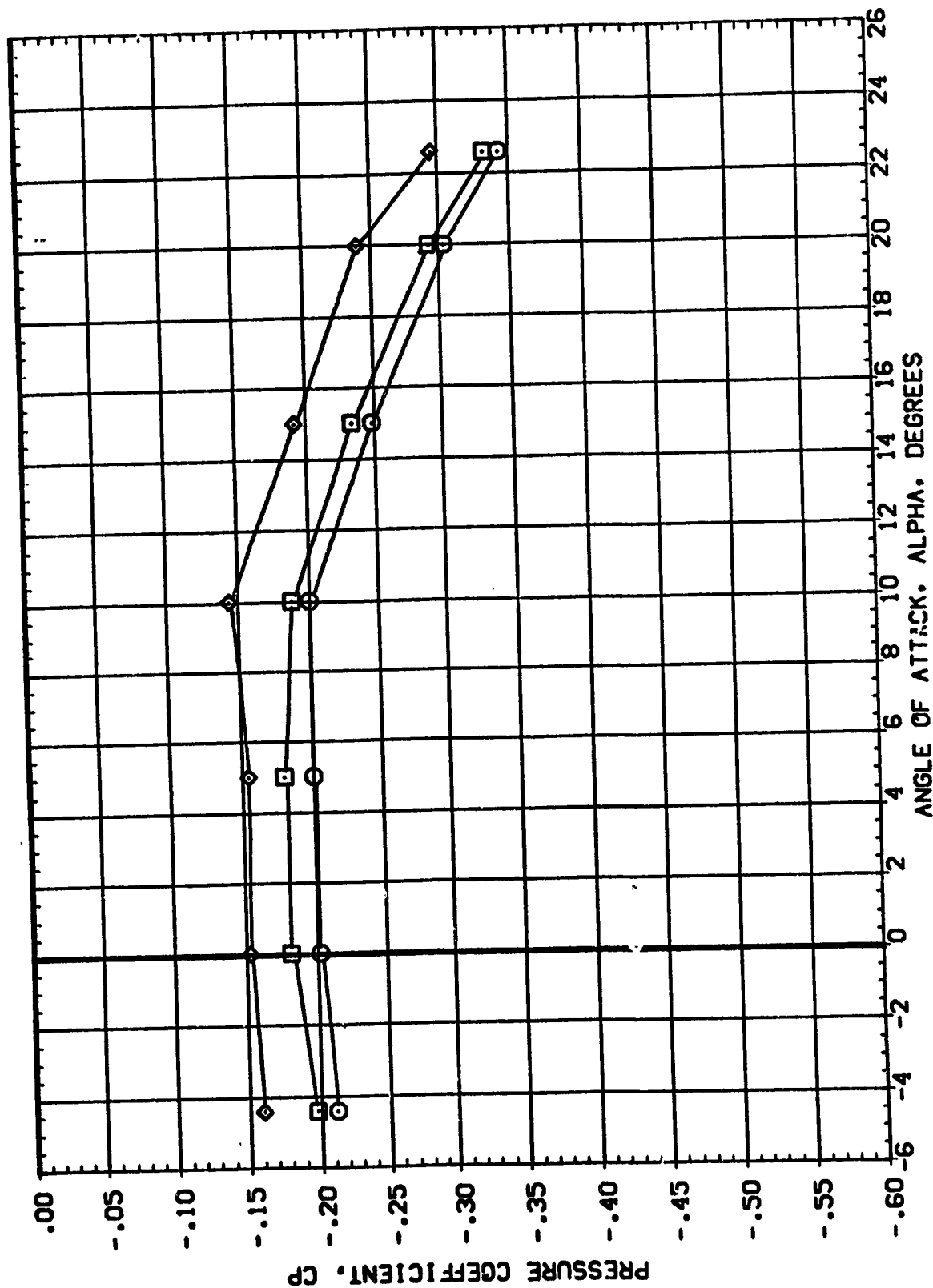
.000

.000

.000

.000

.000



ORBITER BASE PRESSURES

(RBPC01)

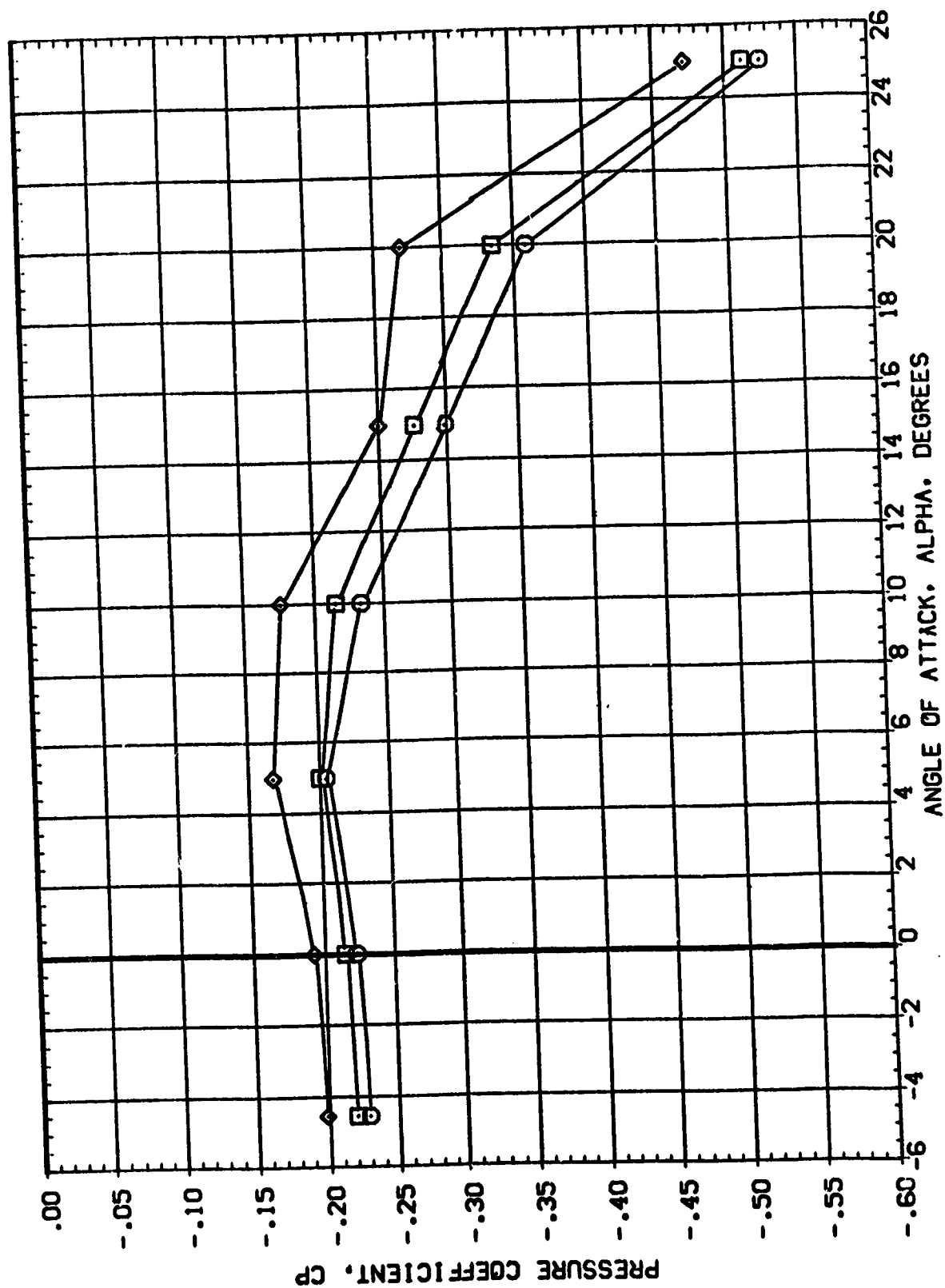
ORBITER BASE

02A

AMES 11-707 0A12

SYMBOL TAP NO A MACH
□ 12.000 .905
□ 13.000
◇ 14.000

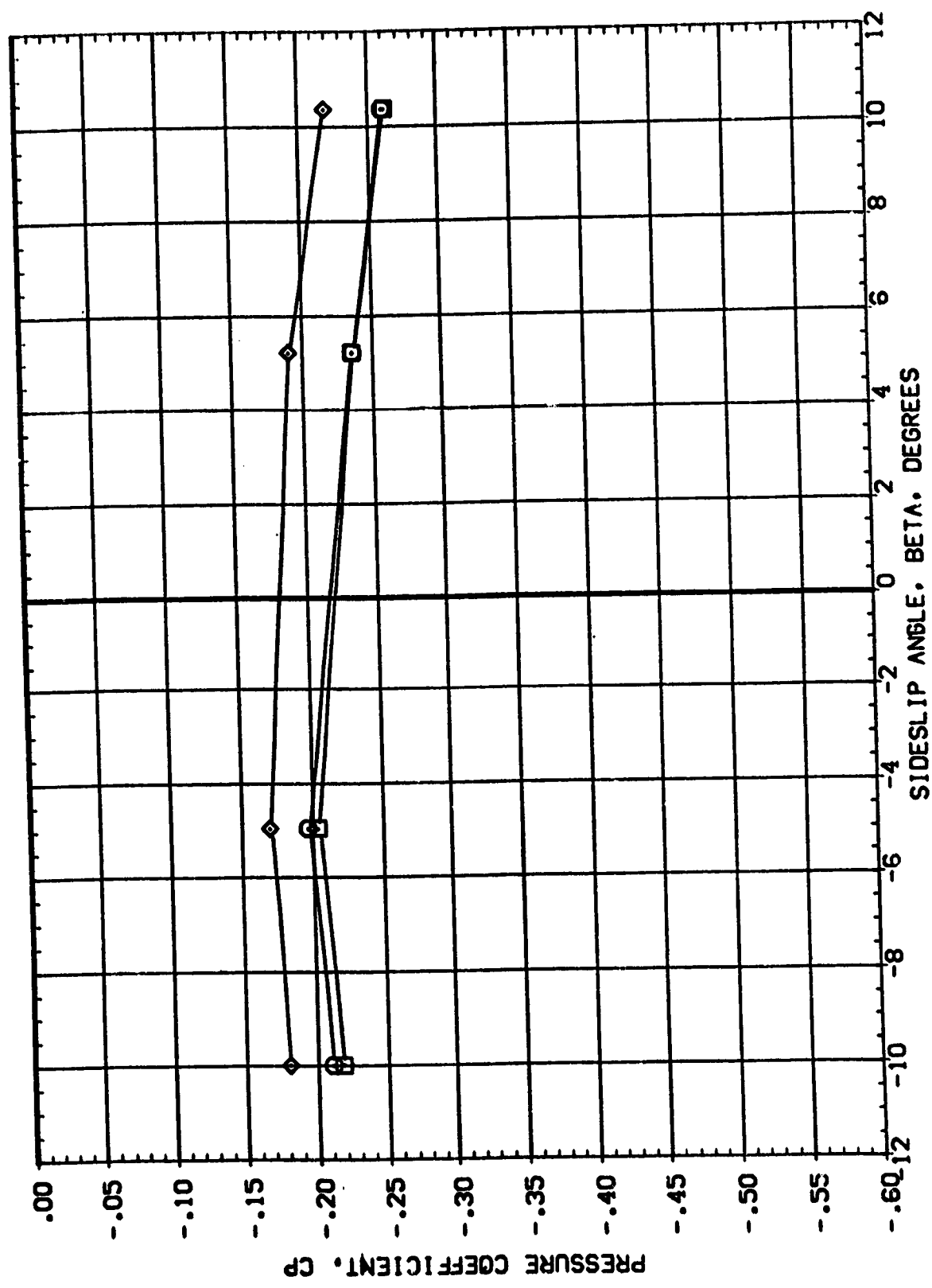
PARAMETRIC VALUES
BETA .000 RUDDER .000
ELEVON .000 RUDDER .000



ORBITER BASE PRESSURES

III

AMES 11-707 0A12 02A ORBITER BASE (RBPC02)
 TAP NO A MACH
 7.000 .000 .598
 8.000
 9.000
 SYMBOL \square \diamond
 PARAMETRIC VALUES
 .000 RUDDER .000
 .000 RLOFLR .000
 ALPHA
 ELEVON



ORBITER BASE PRESSURES

(RBPC02)

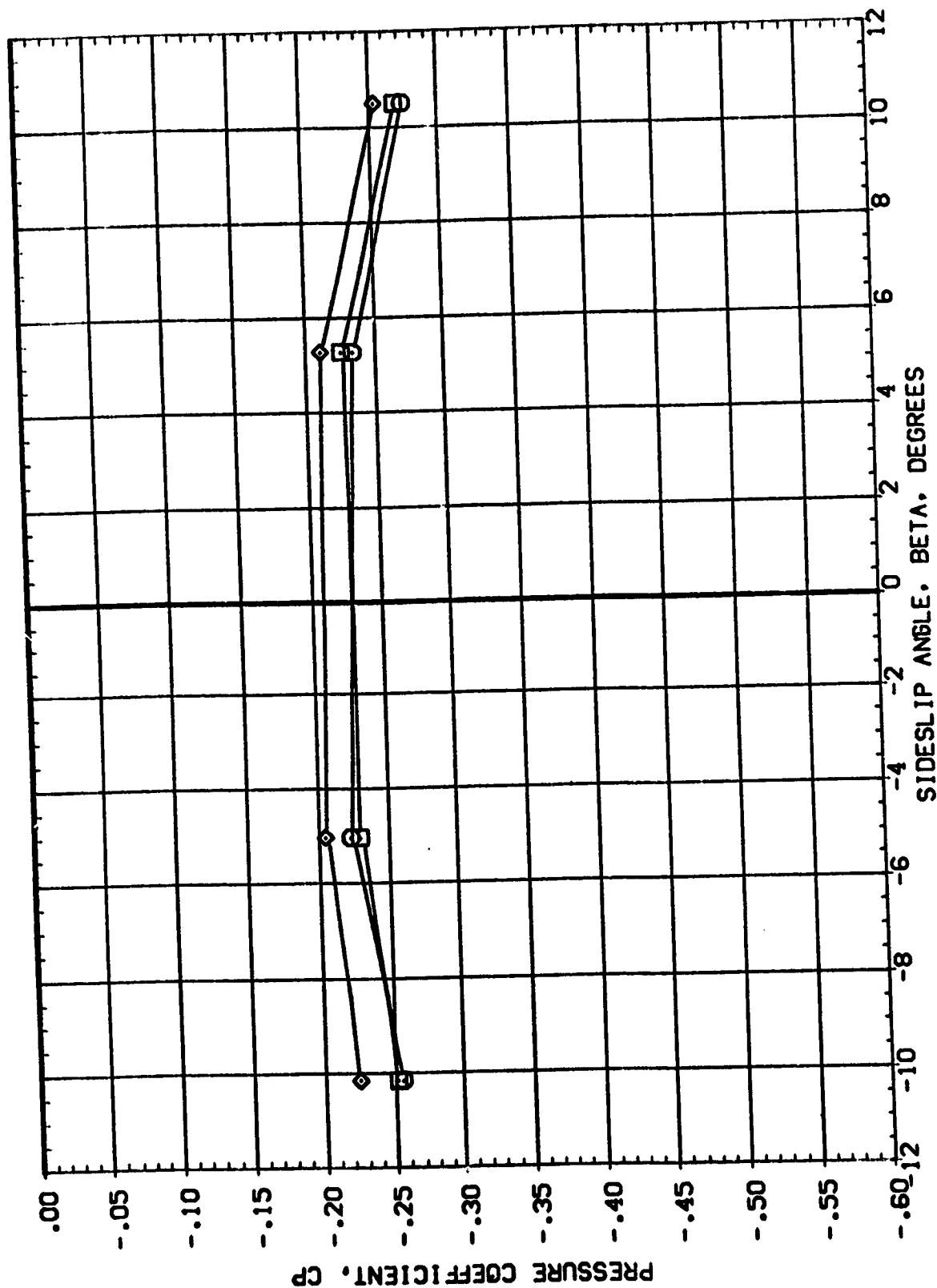
ORBITER BASE

AMES 11-707 0A12 02A

PARAMETRIC VALUES
ALPHA .000 R/COR .000
ELEVON .000 R/JFLR .000

TAP NO A MACH
7.000 .000 .904
8.000
9.000

SYMBOL
□
◇



ORBITER BASE PRESSURES

(RBPC02)

ORBITER BASE

02A

AMES 11-707 0A12

SYMBOL

TAP NO

A

MACH

.598

12.000

13.000

14.000

ALPHA
ELEVON

PARAMETRIC VALUES

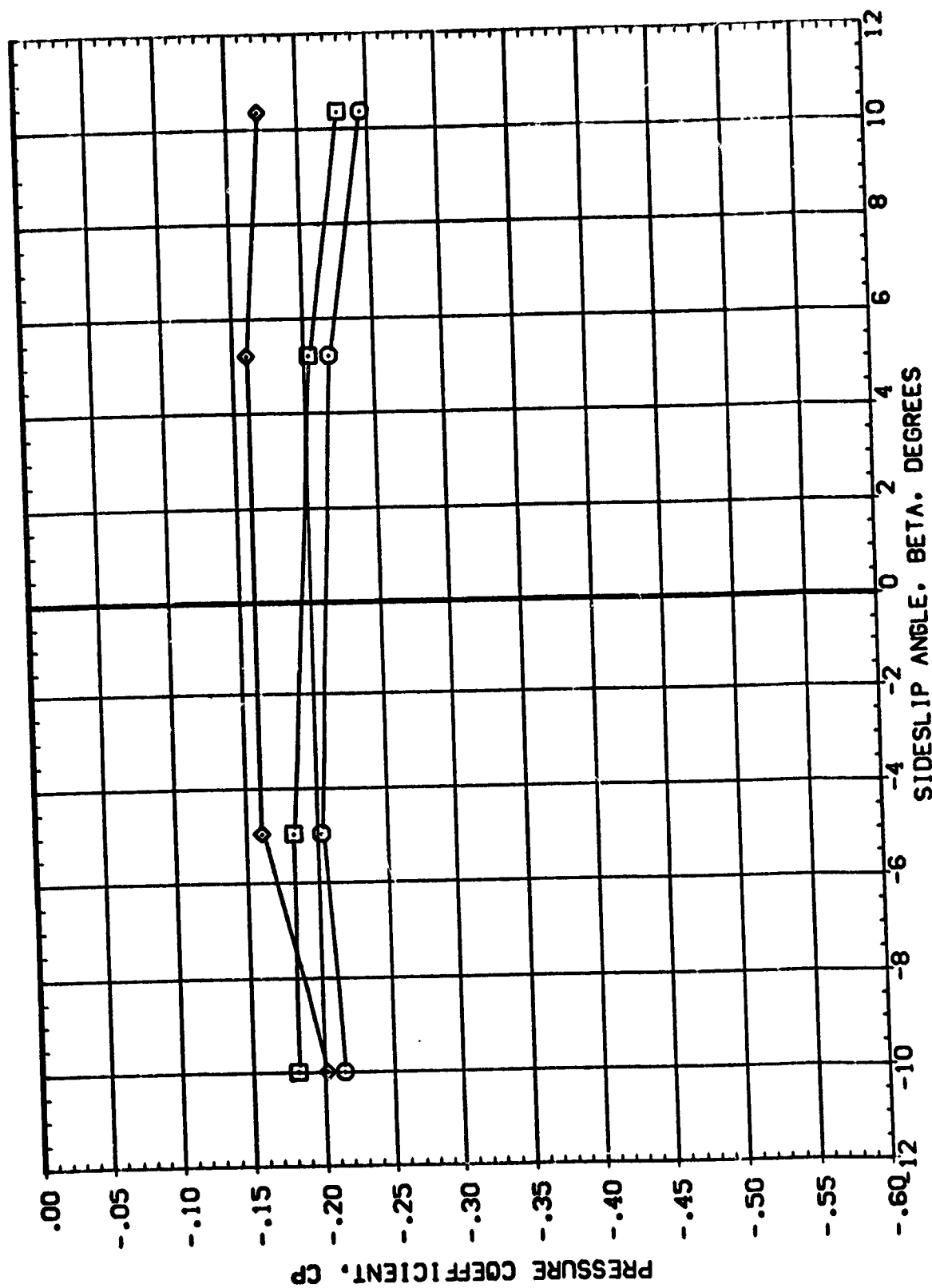
.000

RLODER

.000

RLOFLR

.000



ORBITER BASE PRESSURES

(RBPC02)

ORBITER BASE

Q2A

AMES 11-707 0A12

.000
.000

PARAMETRIC VALUES

RUDER
RUDER

.000
.000

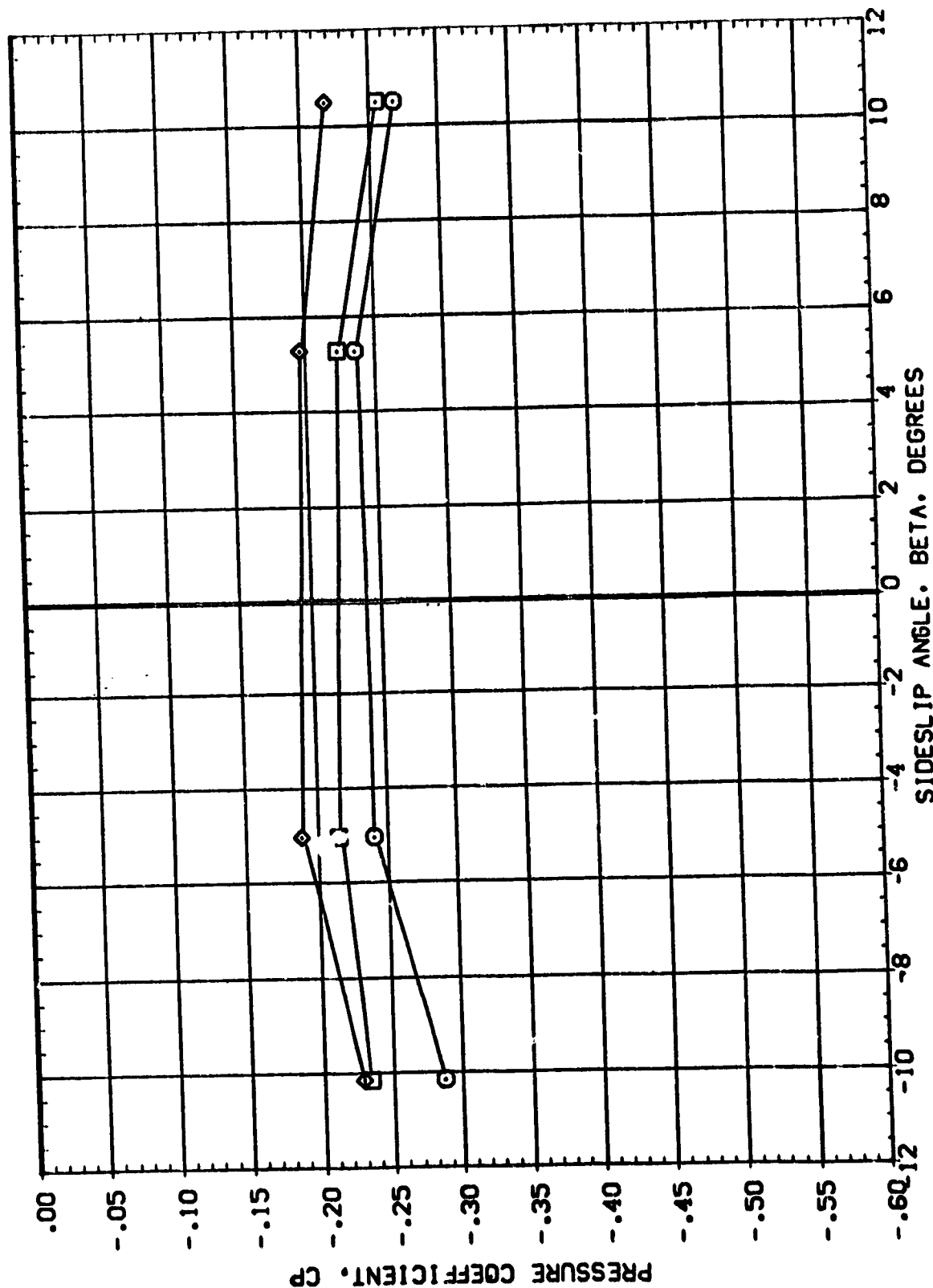
ALPHA
ELEVON

MACH
.904

.000

TAP NO
12.000
13.000
14.000

SYMBOL
□
◇



ORBITER BASE PRESSURES

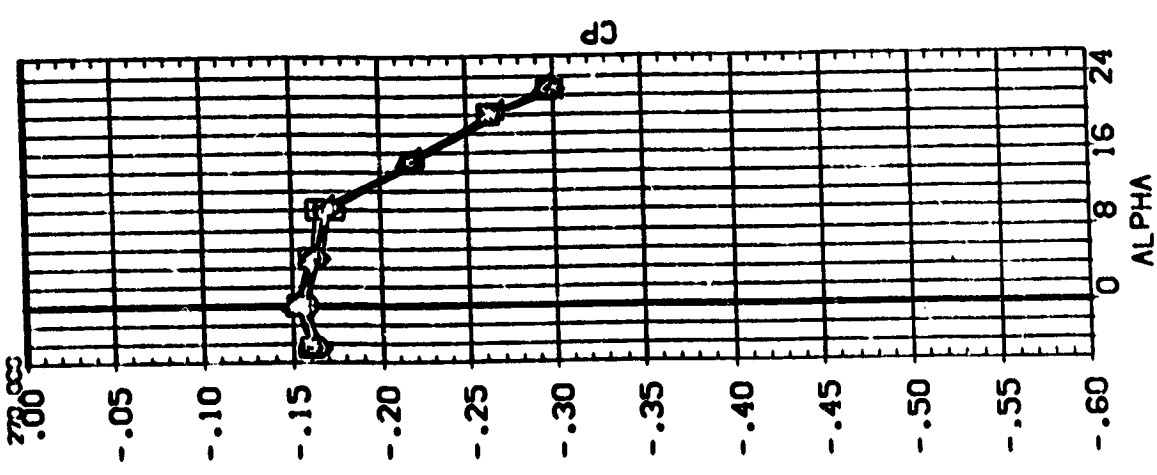
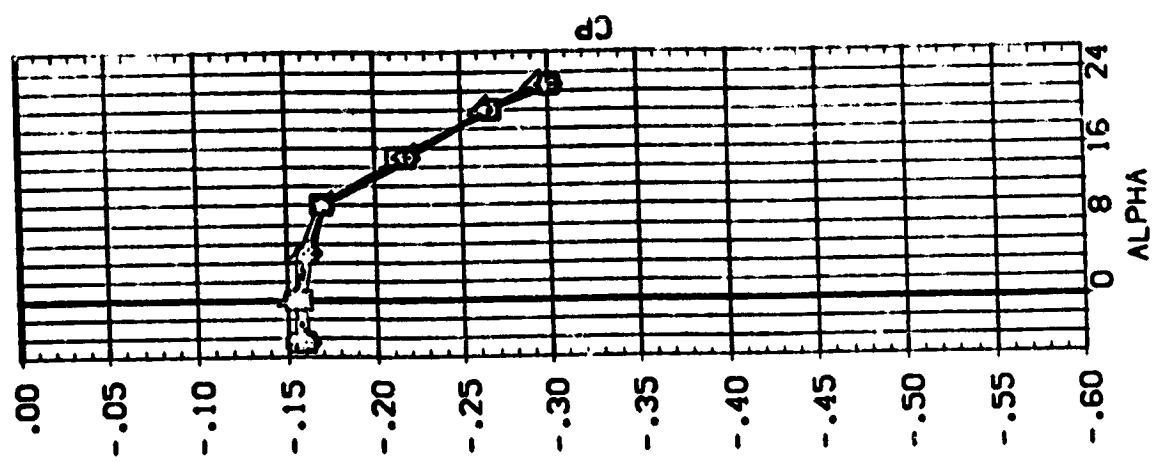
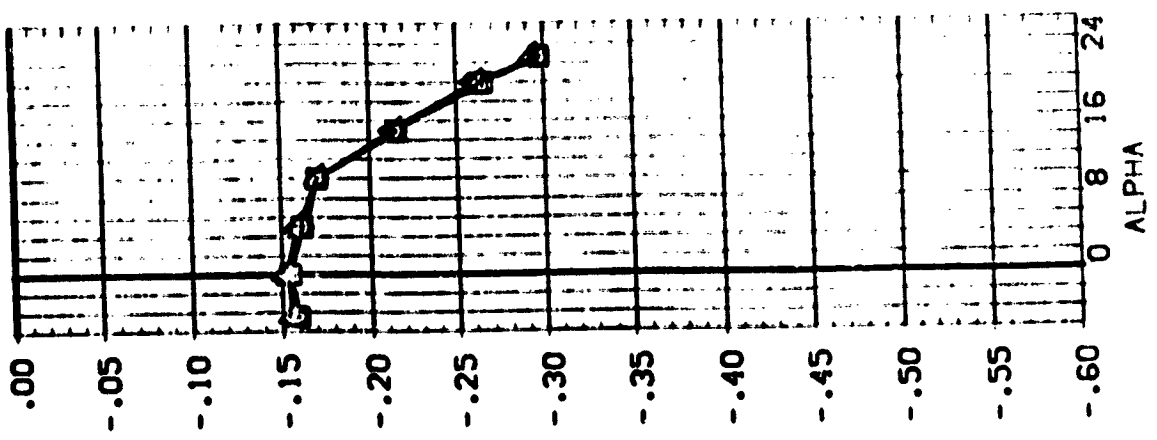
UPPER MPS NOZZLE (R8PDC1)

AMES 11-707 0A12 02A

PARAMETRIC VALUES
 .000 RUMER
 .000 RUMER

BETA
 ELEVEN

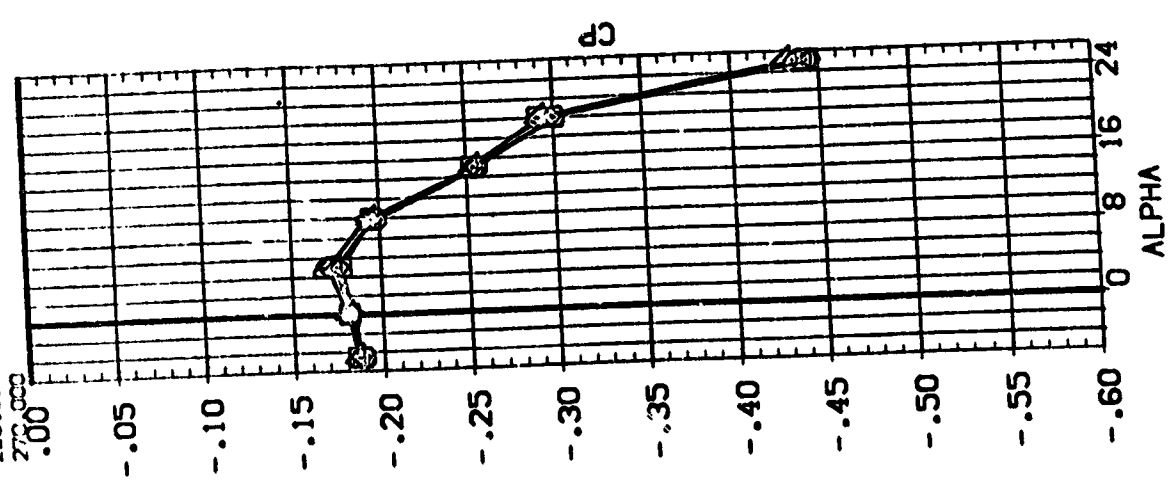
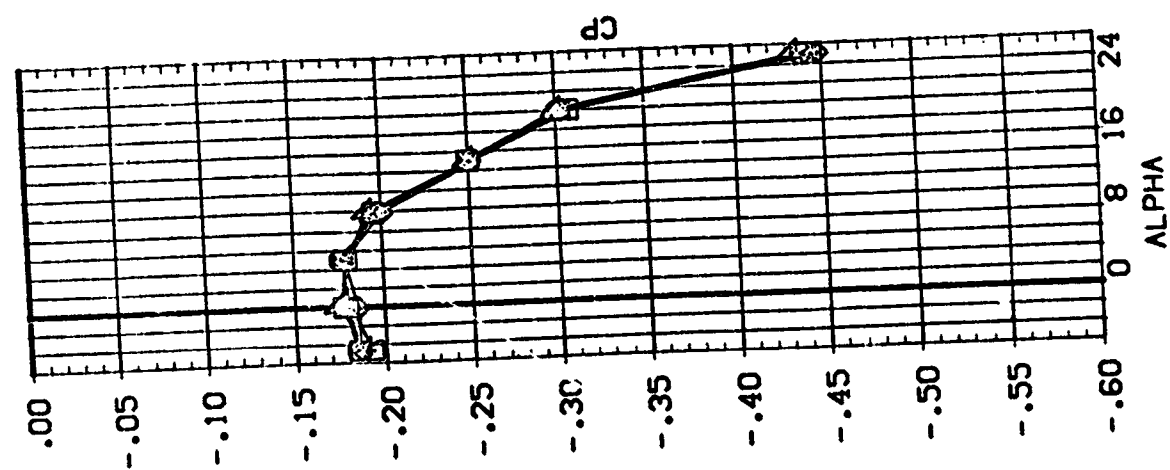
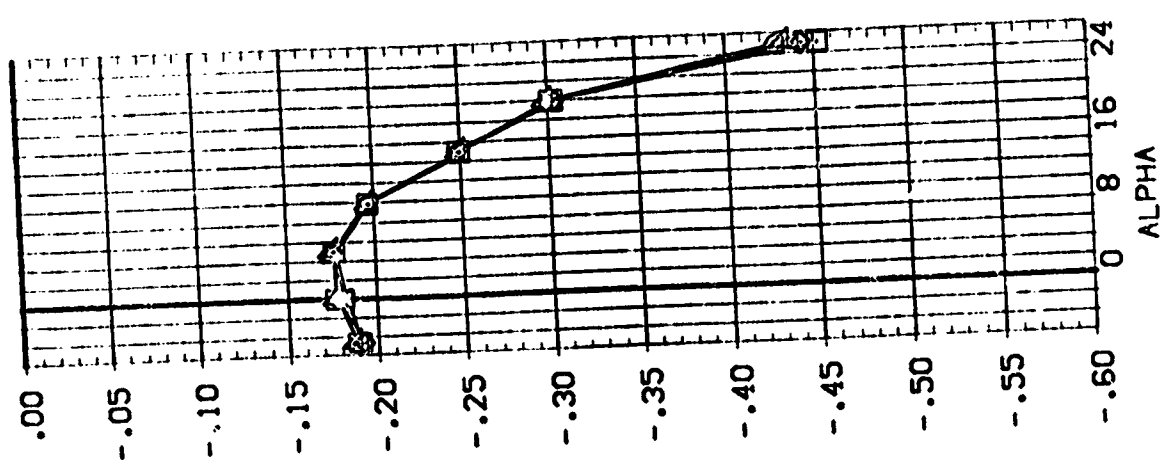
PH: .000 MACH .600
 90.000 .250 .500
 135.000 .750
 180.000
 225.000
 270.000



UPPER MPS NOZZLE PRESSURES

SYMBOL
PHI
X/LNP
MAC+
.000
99.000
135.000
180.000
225.000
270.000
270.000
MAC+
.905
.250
.500
.750

PARAMETRIC VALUES
BETA
ELEVON
.000
.000
RUDDER
RUDDER
.000
.000



UPPER MPS NOZZLE PRESSURES

SYMBOL
 ○ □ ◇ △ ▽

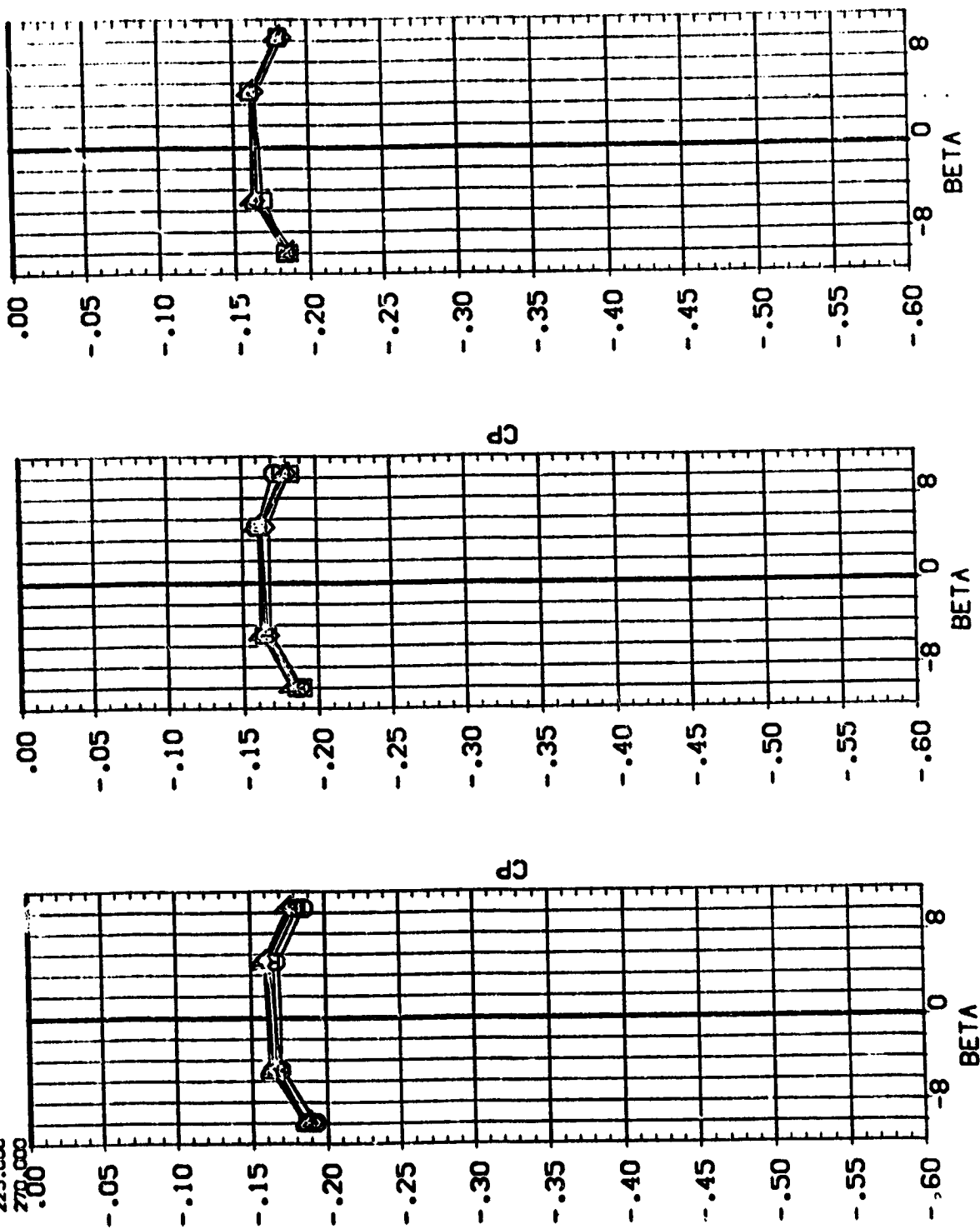
PHI
 .000
 90.000
 135.000
 180.000
 225.000
 270.000

X/LNP
 .250
 .500
 .750

MACH
 .598

PARAMETRIC VALUES
 .000 RUDER
 .000 RUDER
 .000 RUDER

ALPHA
 ELEVON



UPPER MPS NOZZLE PRESSURES

AMES 11-7607 0112 02A

SYMBOL
 PH1
 .000
 90.000
 135.000
 180.000
 225.000
 270.000

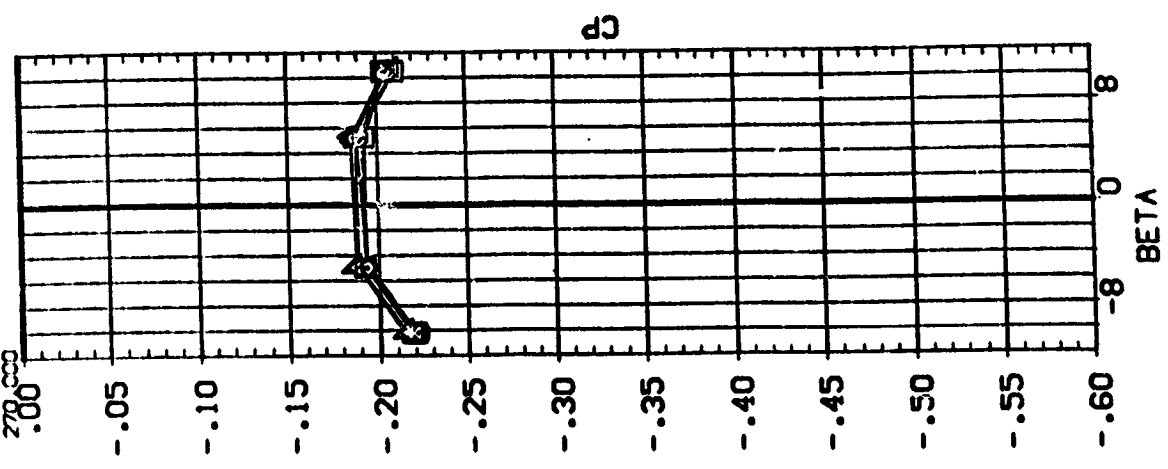
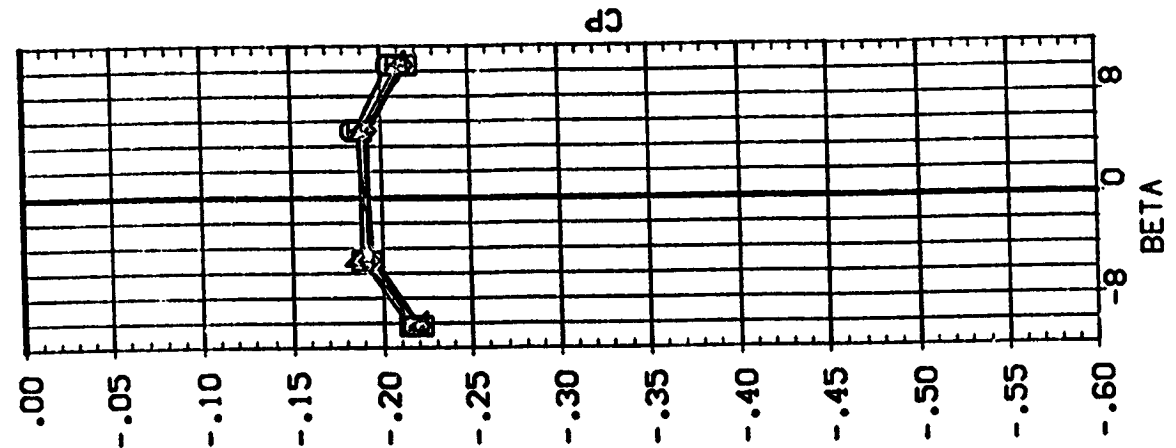
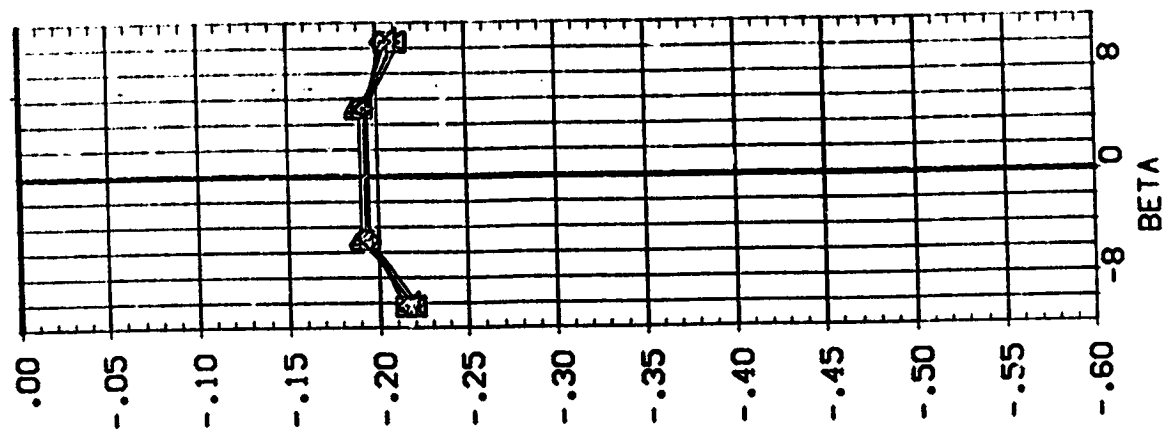
X/LNP
 .250
 .500
 .750

MACH

.904

ALPHA
 ELEVON
 .000
 .000
 .000
 .000

PARAMETRIC VALUES
 RUDDER
 RUDDER
 RUDDER



UPPER MPS NOZZLE PRESSURES

(RBPEO:)

OMS NOZZLE

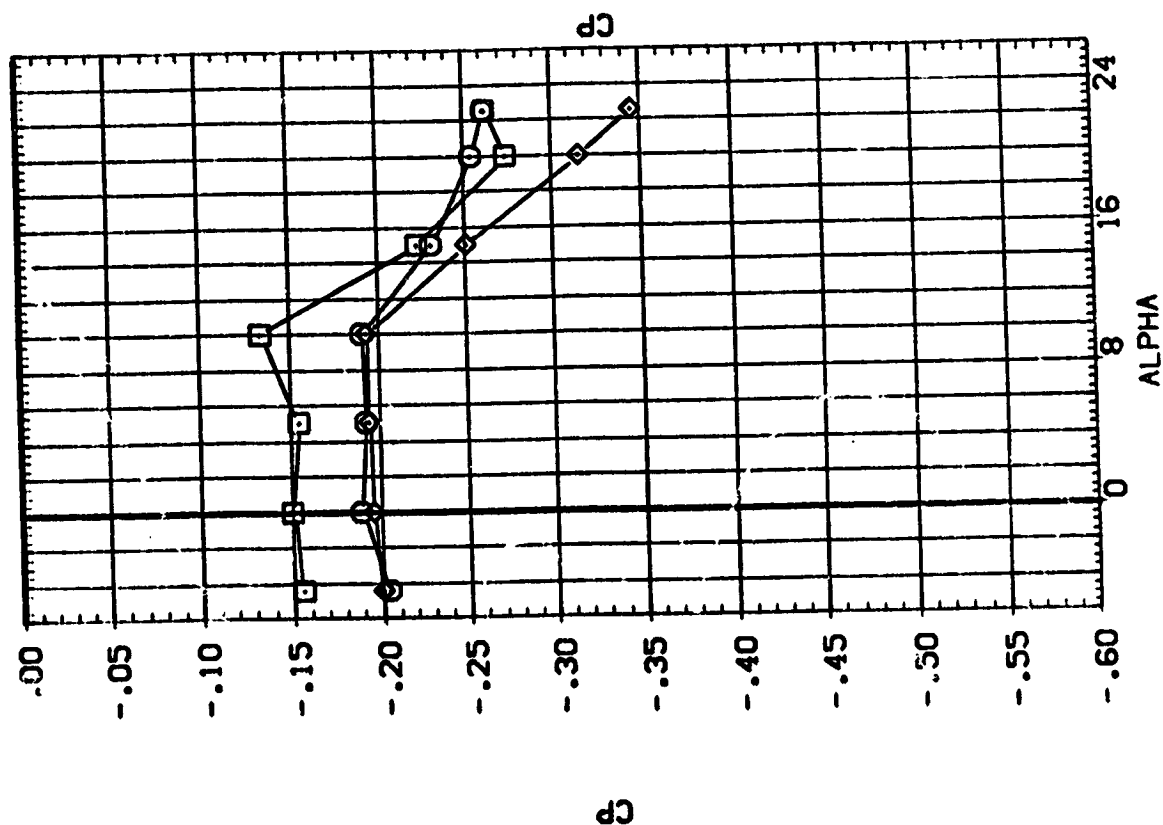
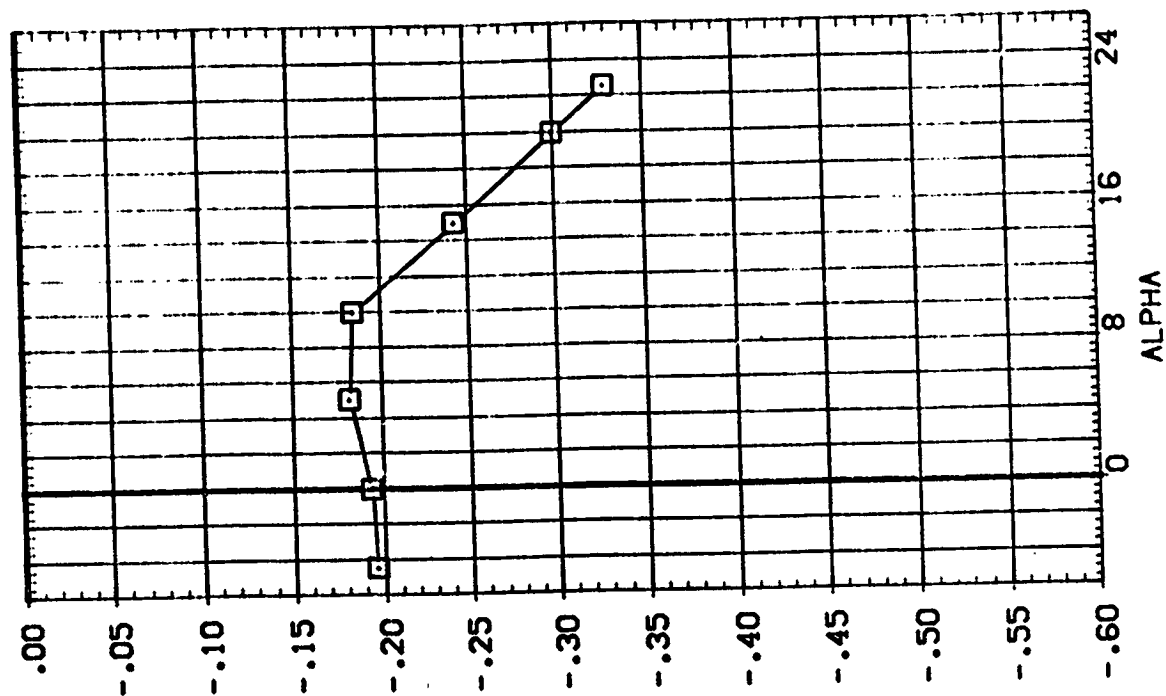
AMES 11-707 0A12 02A

SYMBOL
○ □ ◇

PM1
135.000
180.000
225.000

X/LUM MACH
.200 .600
.400

PARAMETRIC VALUES
BETA .000
ELEVON .000
RUDDER .000
RUFELR .000



OMS NOZZLE PRESSURES



(R32E02)

OMS NOZZLE

AMES 11-707 0A12 02A

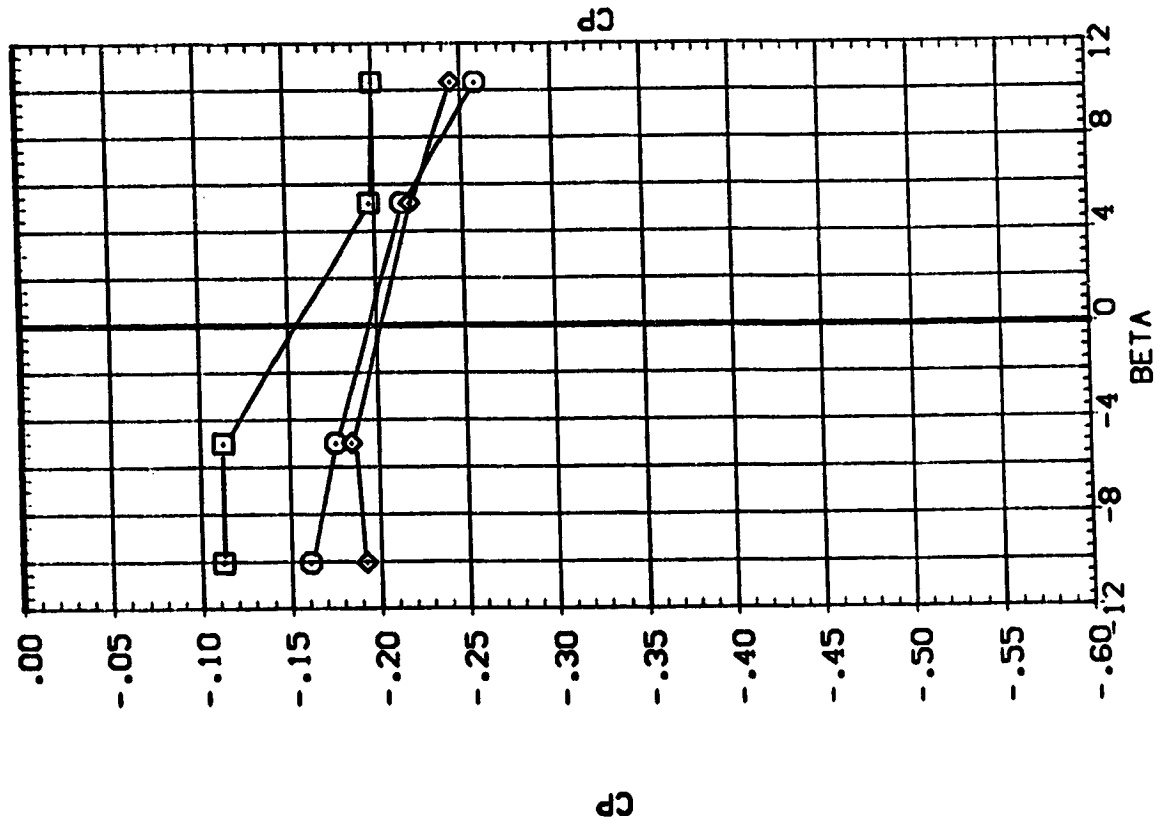
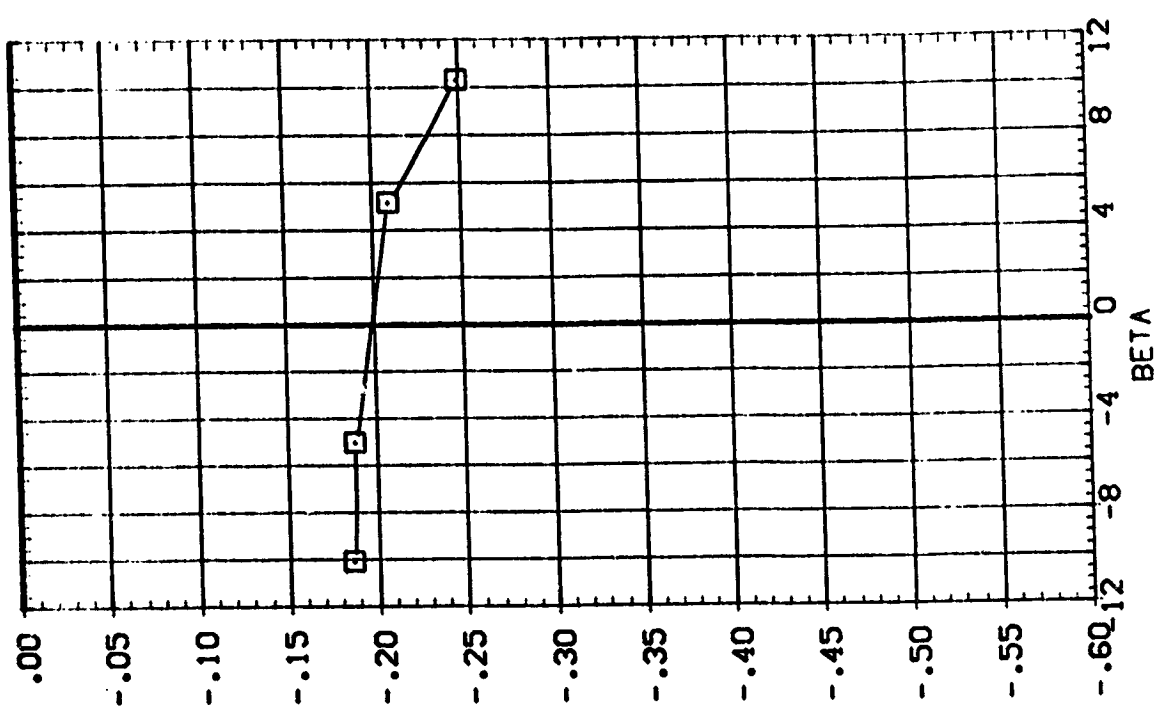
SYMBOL
○
□
◇

PHI
135.000
180.000
225.000

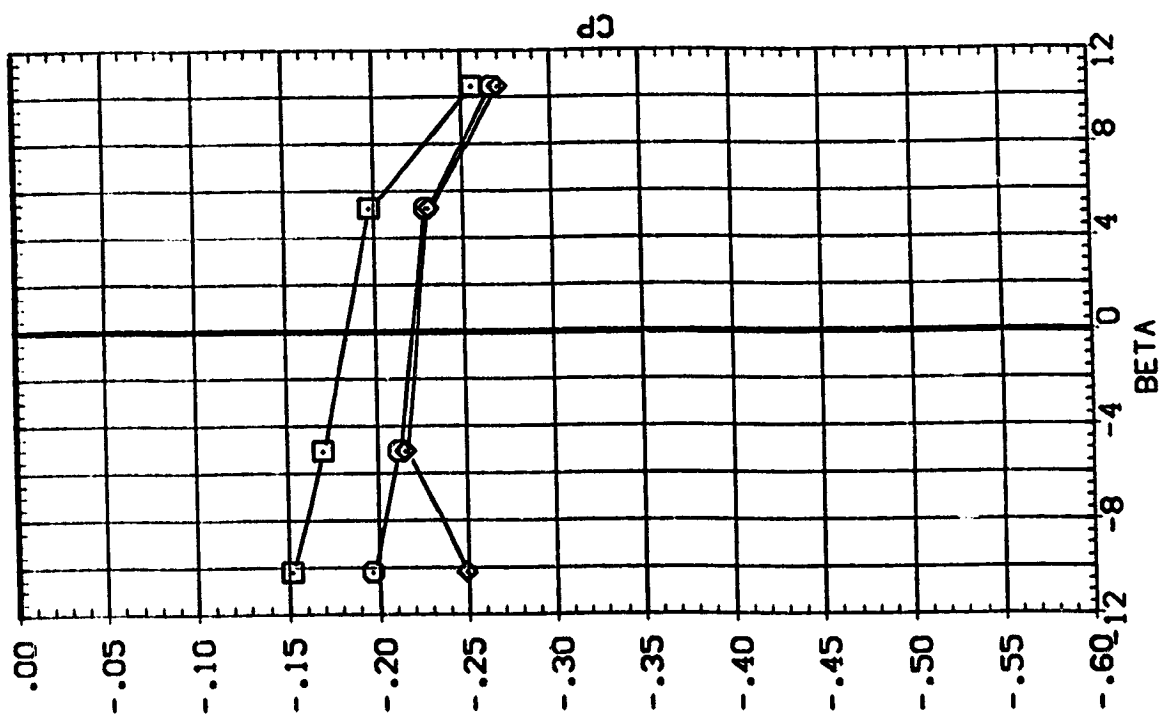
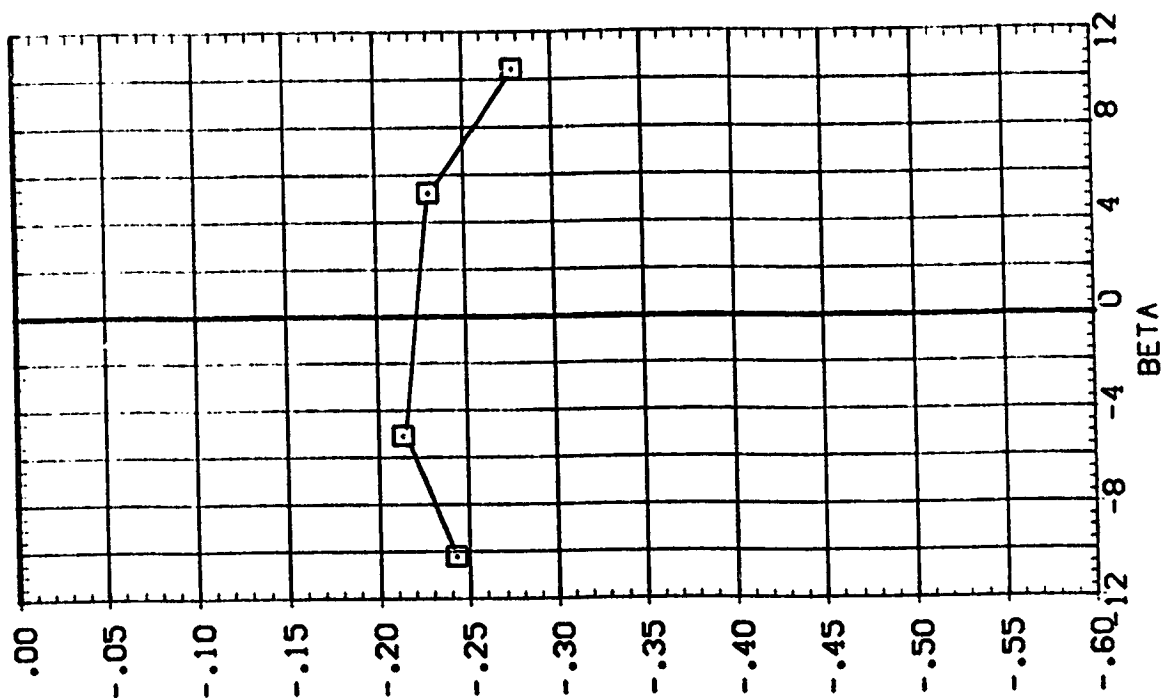
X/LIN
.200
.400

MACH
.598

PARAMETRIC VALUES
ALPHA
ELEVON
.000
RUDDER
RUDFLR
.000
.000



OMS NOZZLE PRESSURES



QMS NOZZLE PRESSURES

III

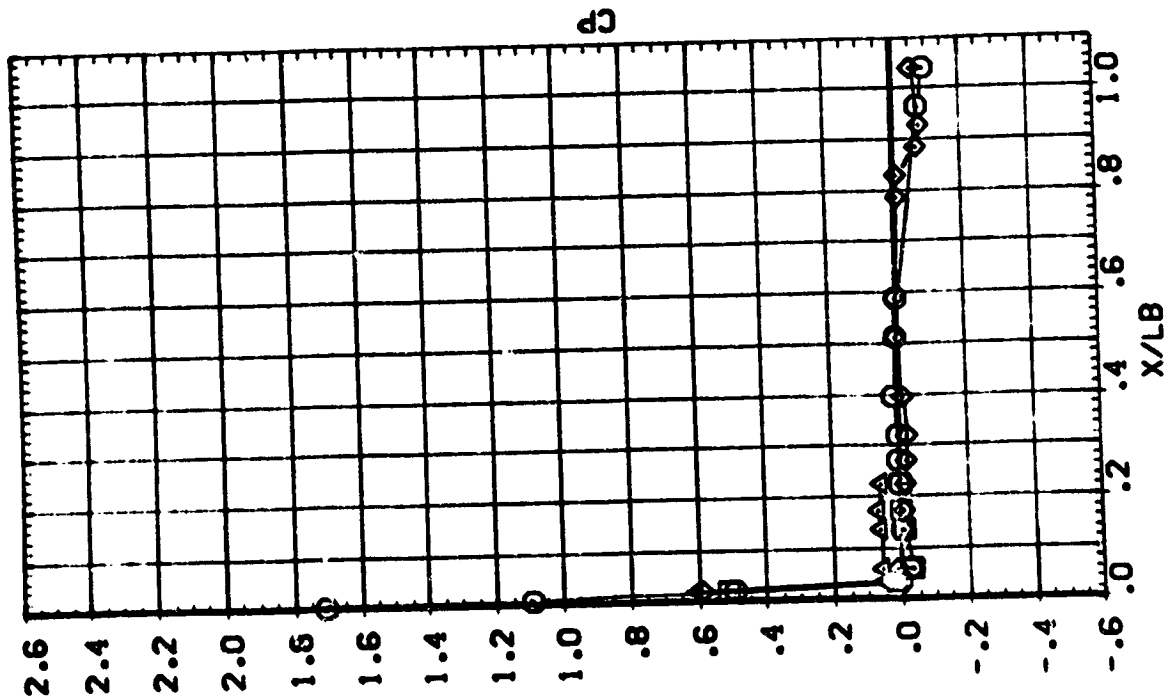
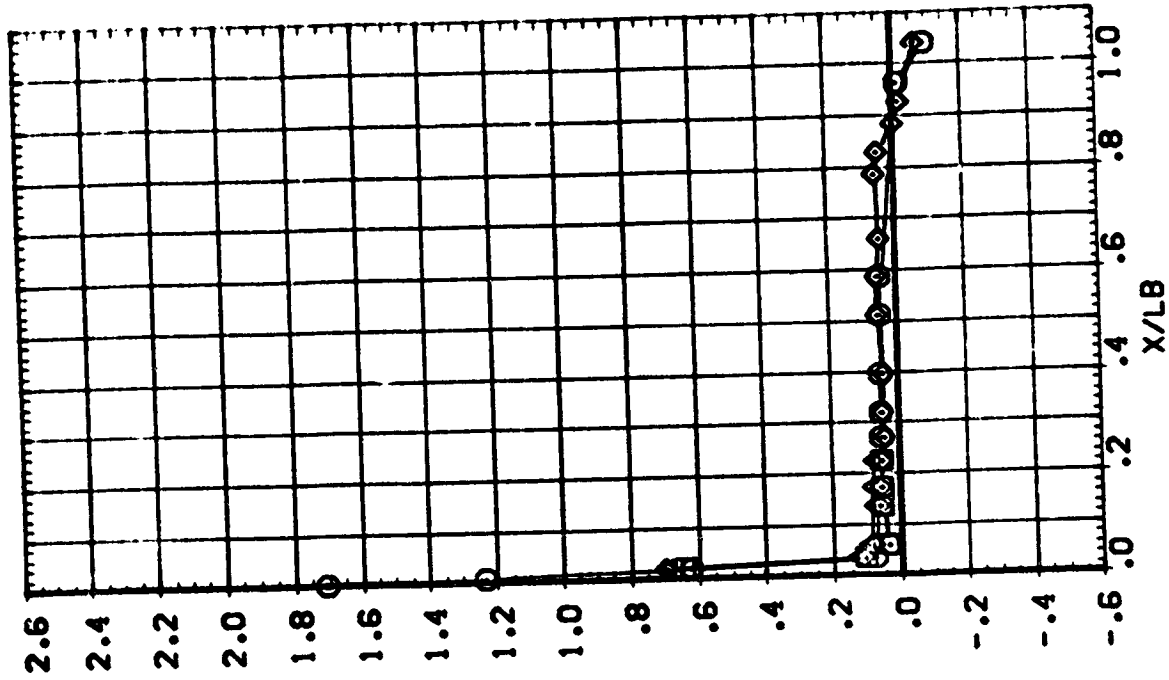
AMES 87-707 CA12 02A ORBITER FUSELAGE (RBQB01)

PARAMETRIC VALUES
 BETA .000 RUDDER .000
 ELEVON .000 RUDEL R 40.000

SYMBOL
 .000
 20.000
 40.000
 55.000

ALPHA
 .090
 4.960

MACH
 2.498



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBGBO1)

AVES 87-707 CA12 C2A

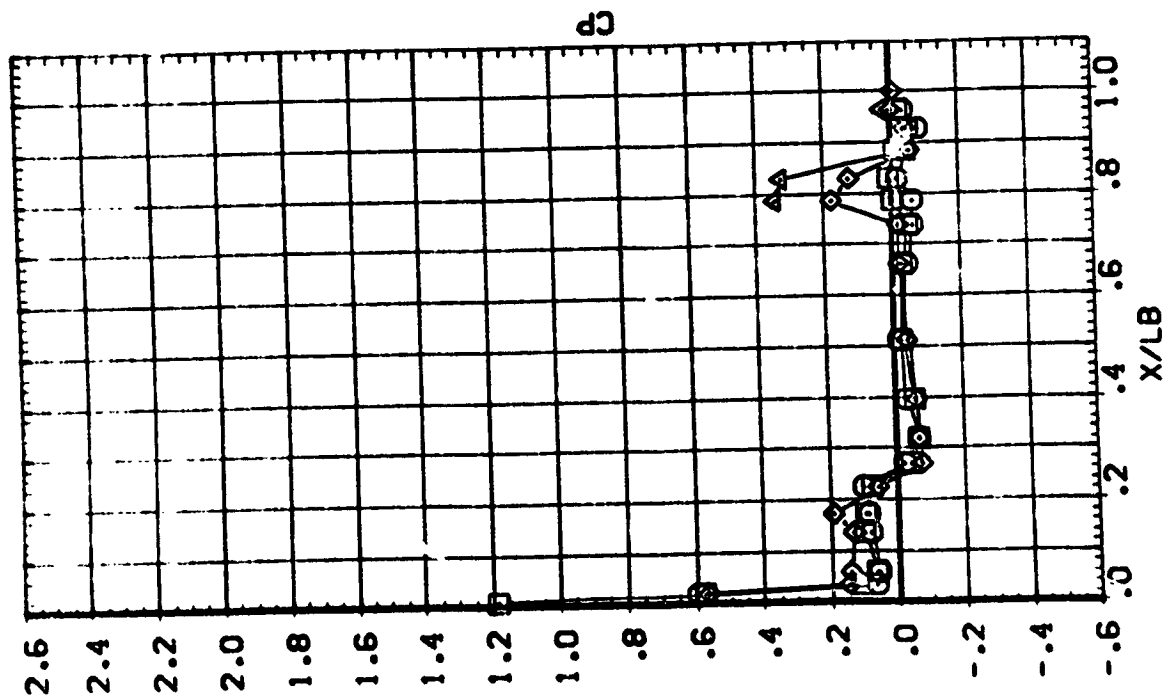
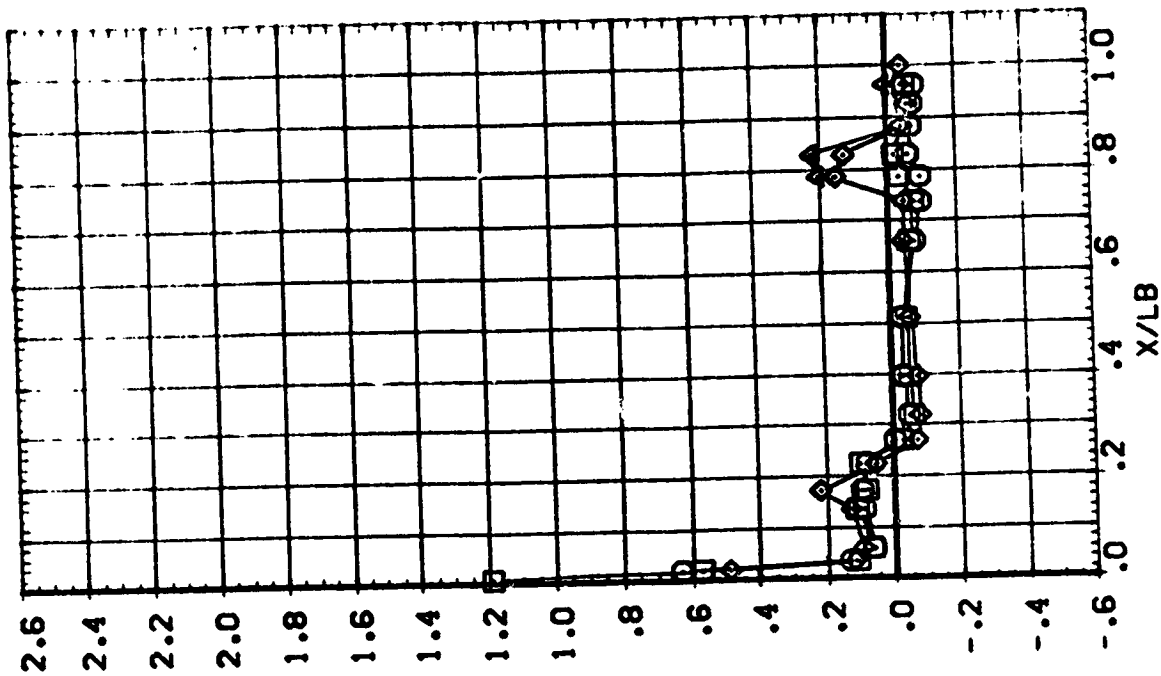
SYMBOL
 ()
 □
 △

PHI
 70.000
 90.000
 120.000
 135.000

ALPHA
 .590
 4.960

MACH
 2.498

PARAMETRIC VALUES
 .000 .000 .000
 BETA ROLLER ROLLER
 ELEVON 40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES



AVES 87-707 GA12 02A ORBITER FUSELAGE (R33801)

SYMBOL
□
◇

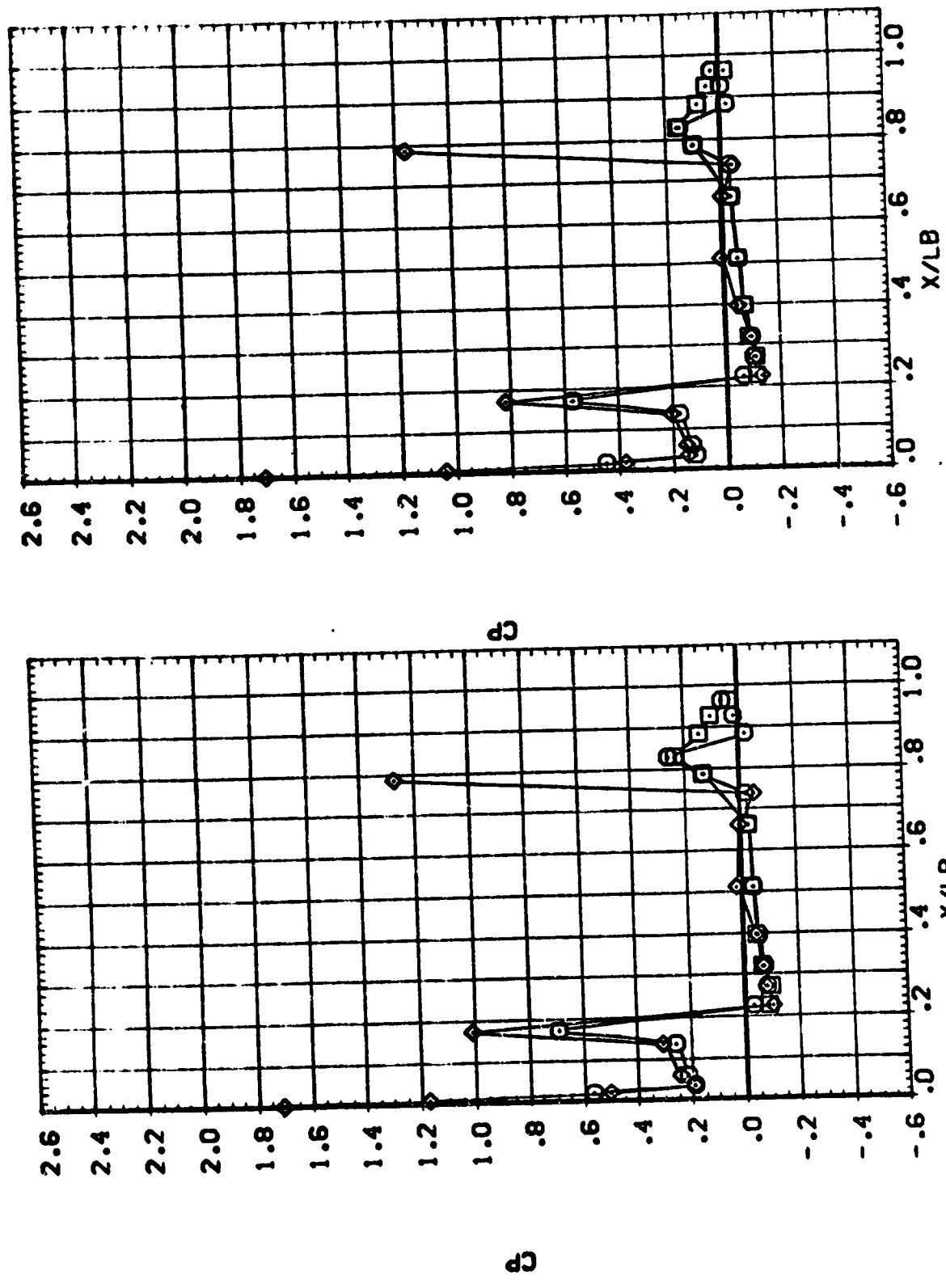
PMI
150.000
165.000
180.000

A. PMA
- .090
4.960

MACH
2.498

BETA
ELEVON

PARAMETRIC VALUES
.000 RUDDER
.000 RUDFLR
.000
40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RB3BC1)

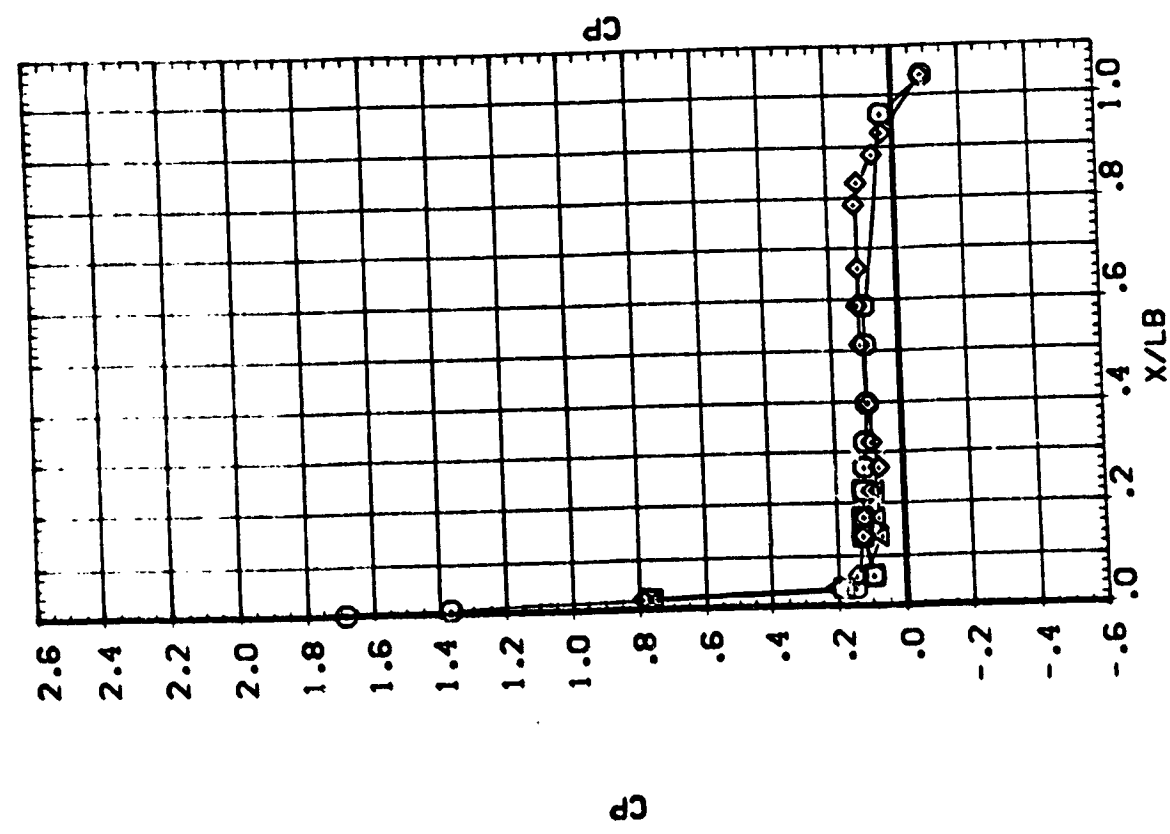
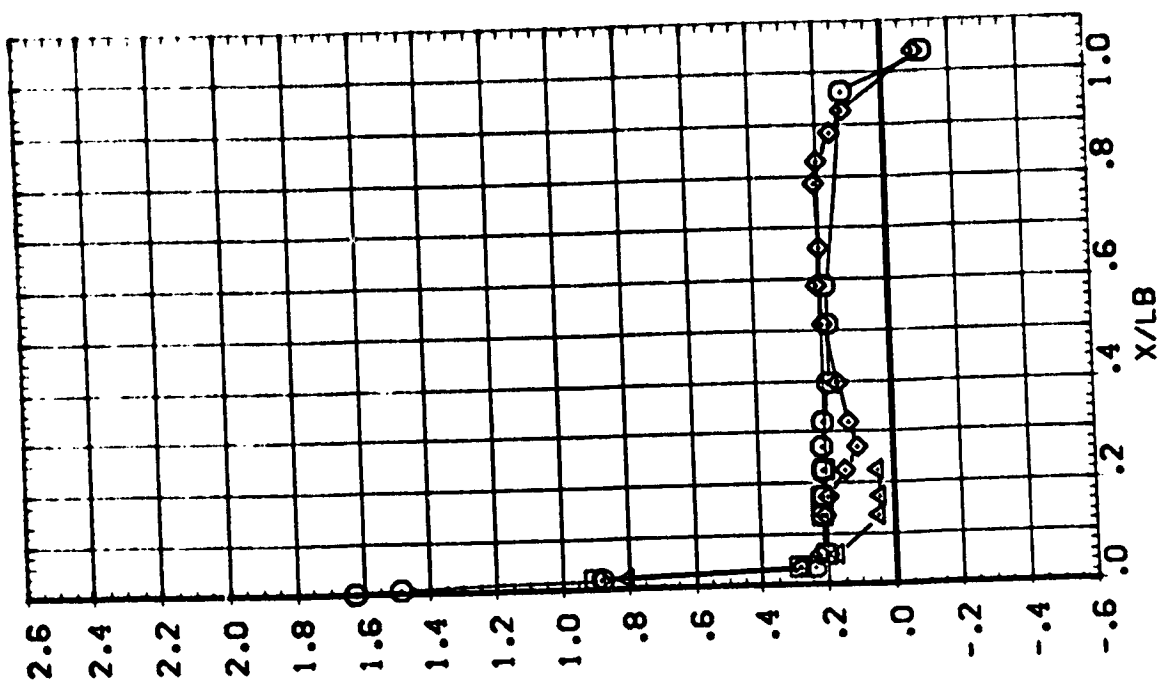
AVES 87-707 CA:2 C2A

PARAMETRIC VALUES
 BETA .000
 ELEVON .000
 RUDER .000
 PLOFLR 45.000

SYMBOL
 ()
 []
 < >
 Δ

ALPHA
 9.970
 14.890

MAC
 2.498



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES



AMES 87-707 0A12 02A

SYMBOL
 ○ □ ◇ △

PH: 70.000 90.000 120.000 135.000

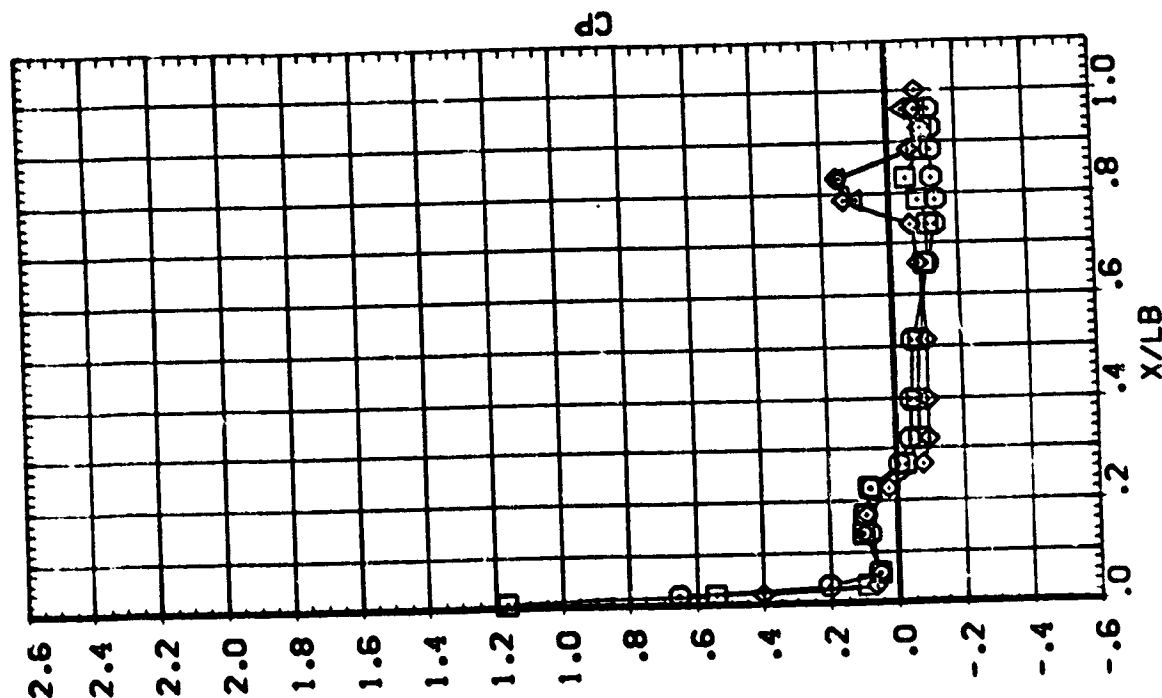
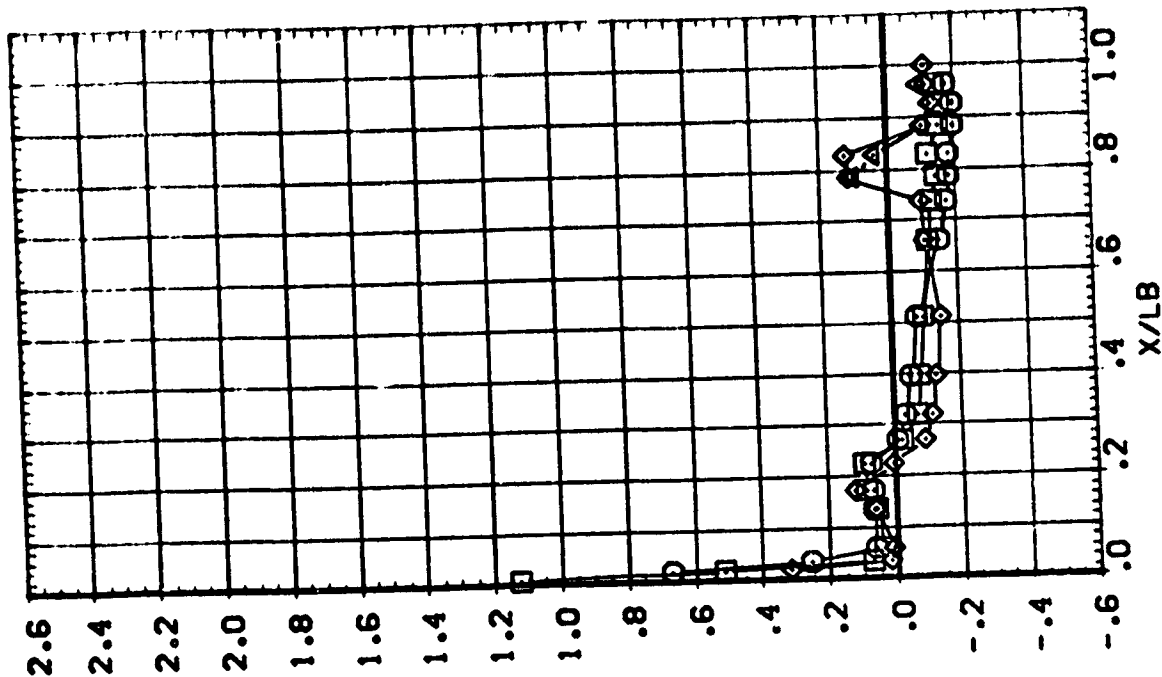
ALPHA 9.970 14.890

MACH 2.498

ORBITER FUSELAGE (RBQ80:)

BETA
 ELEVON

PARAMETRIC VALUES
 .000 .000 .000
 RUDER RUDLR 40.000



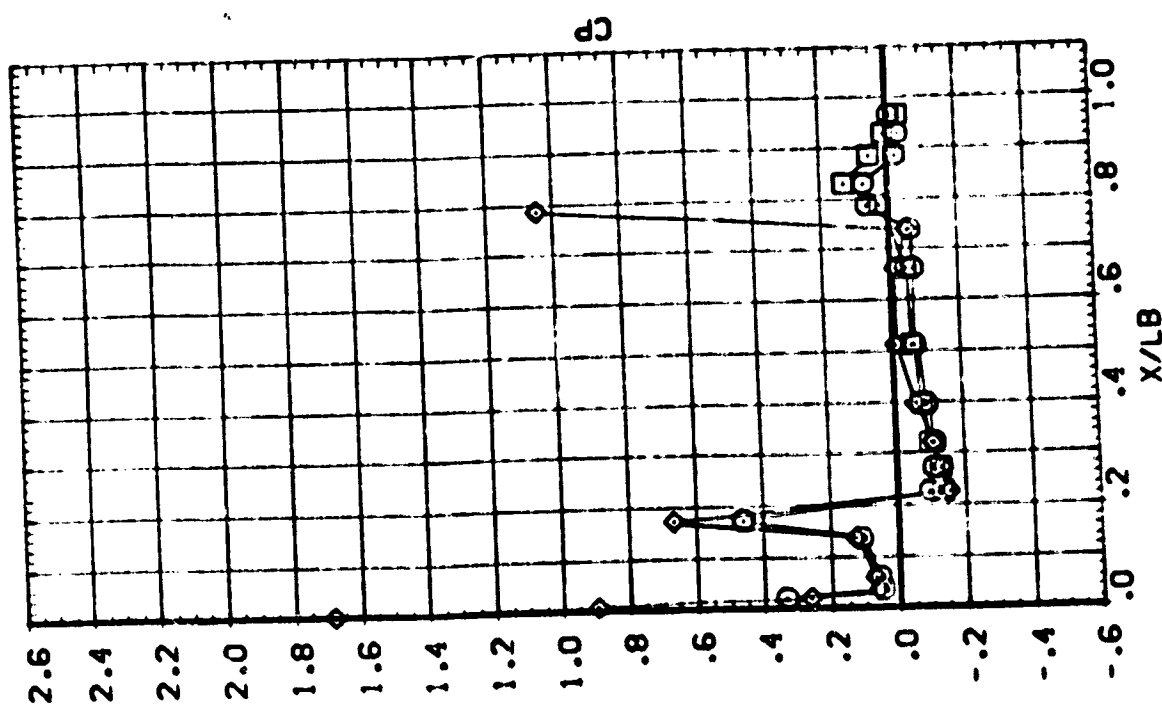
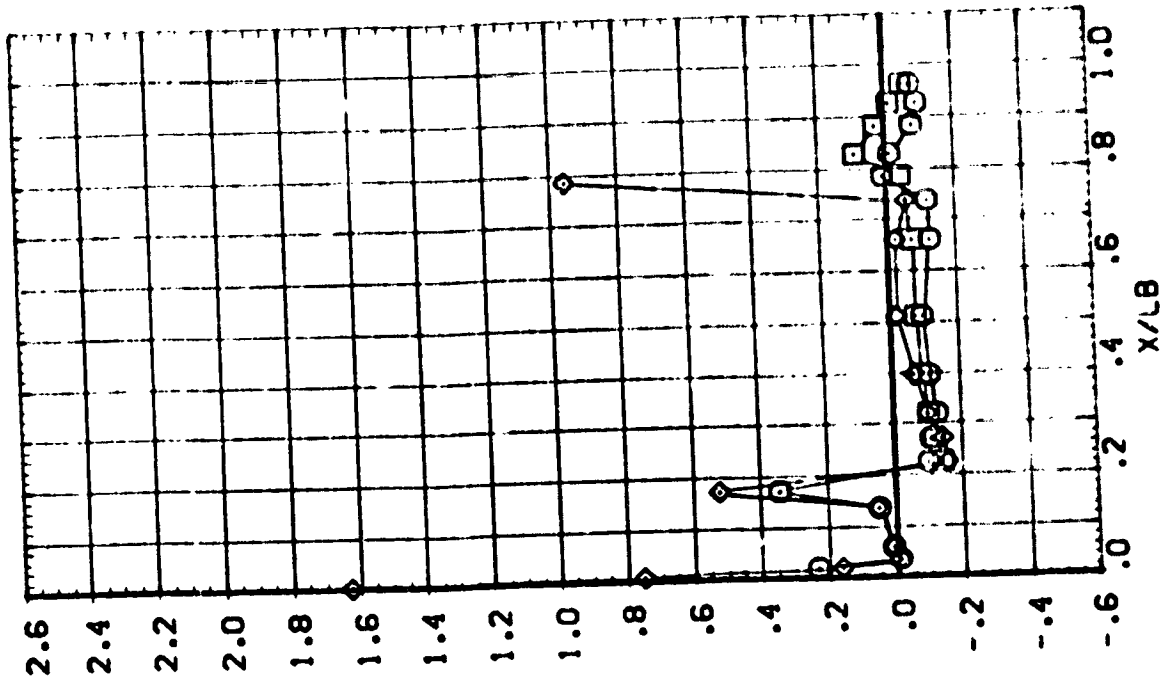
LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBCB01)

AVES 87-707 CA:2 C2A

SYNCH: 100.000 150.000 180.000
 ALPHA: 9.970 14.890
 MACH: 2.498

BETA: .000
 ELEVON: .000
 RUDER: .000
 ROLF: 40.000

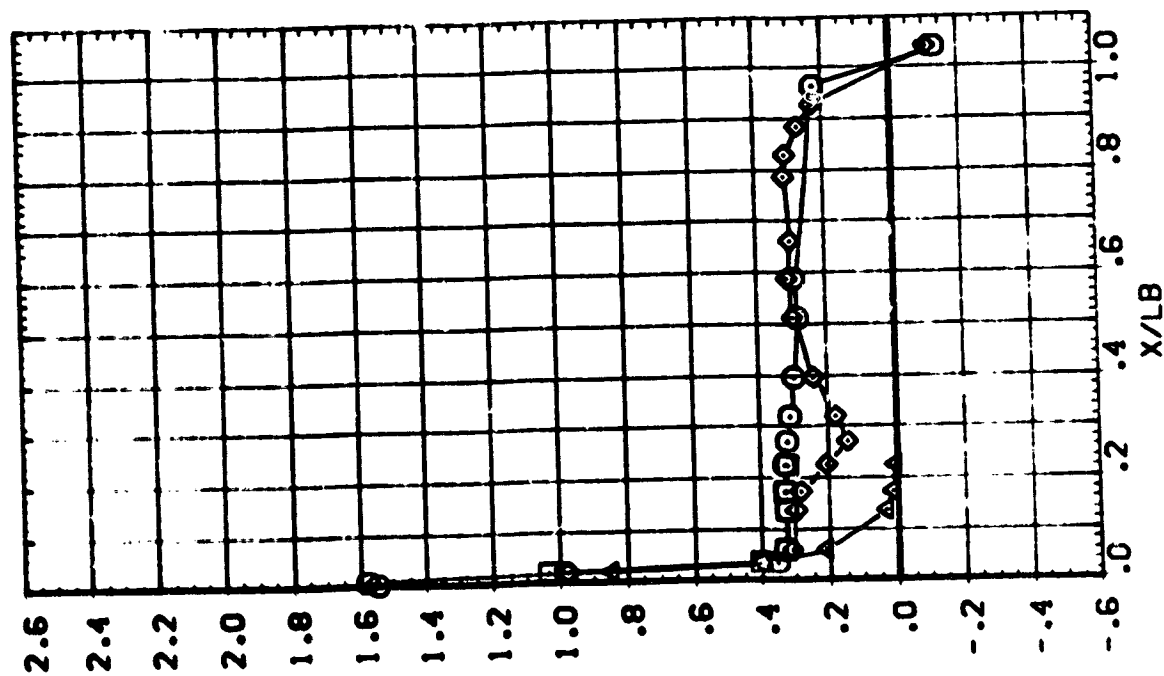


LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

AV: S 87-707 CA: 2

PARAFFINIC VALES	12.11
.000 0.000	12.11
.000 0.000	12.11

Sveta	P:	A. A.	M.S.
		:9.870	7.450



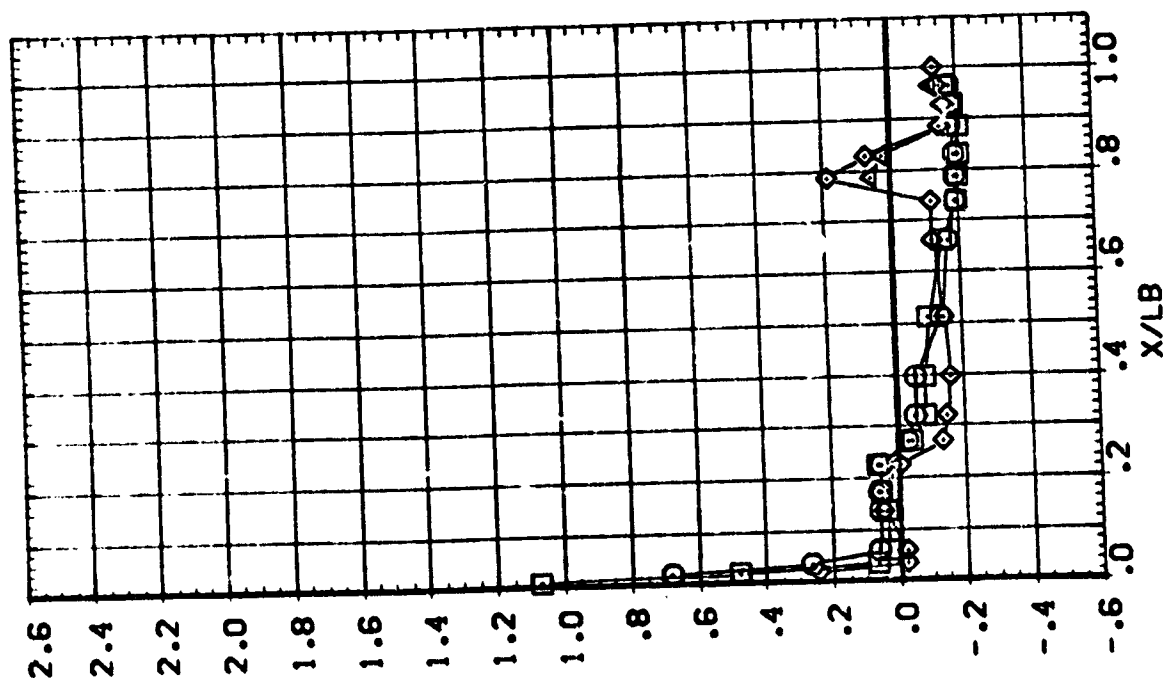
LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

SYMBOL
 ○ 70.000
 □ 90.000
 ◇ 120.000
 △ 135.000

ALPHA MACH
 19.870 2.498

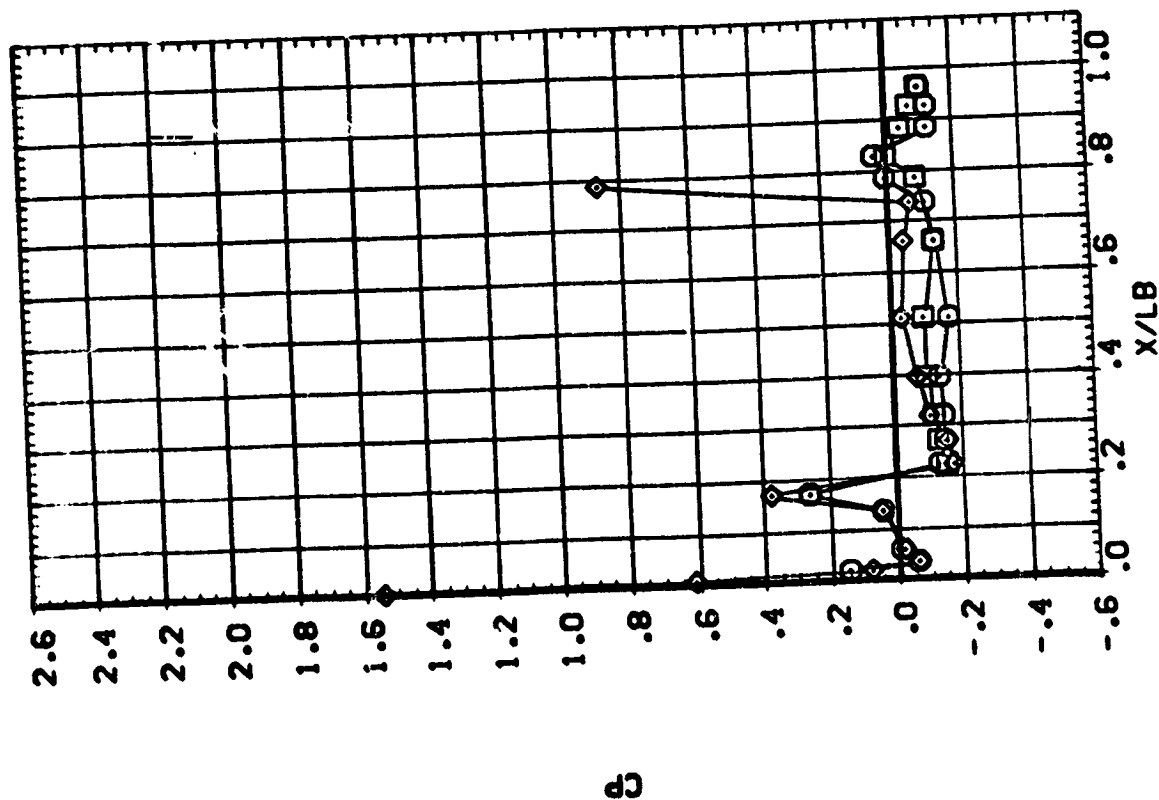
BETA
 ELEVON

PARAMETRIC VALUES
 .000 RUDER
 .000 RUDFLR
 .000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

SYMBOL	PH	ALPHA	MACH
○	150.000	19.870	2.495
□	165.000		
◇	180.000		



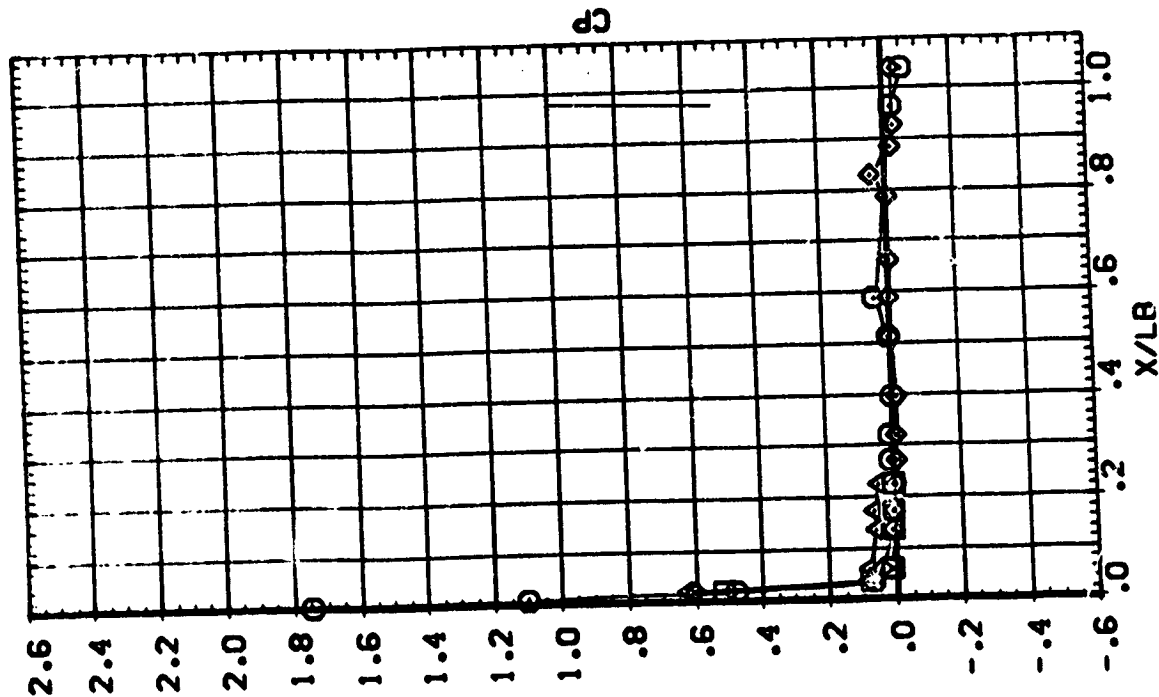
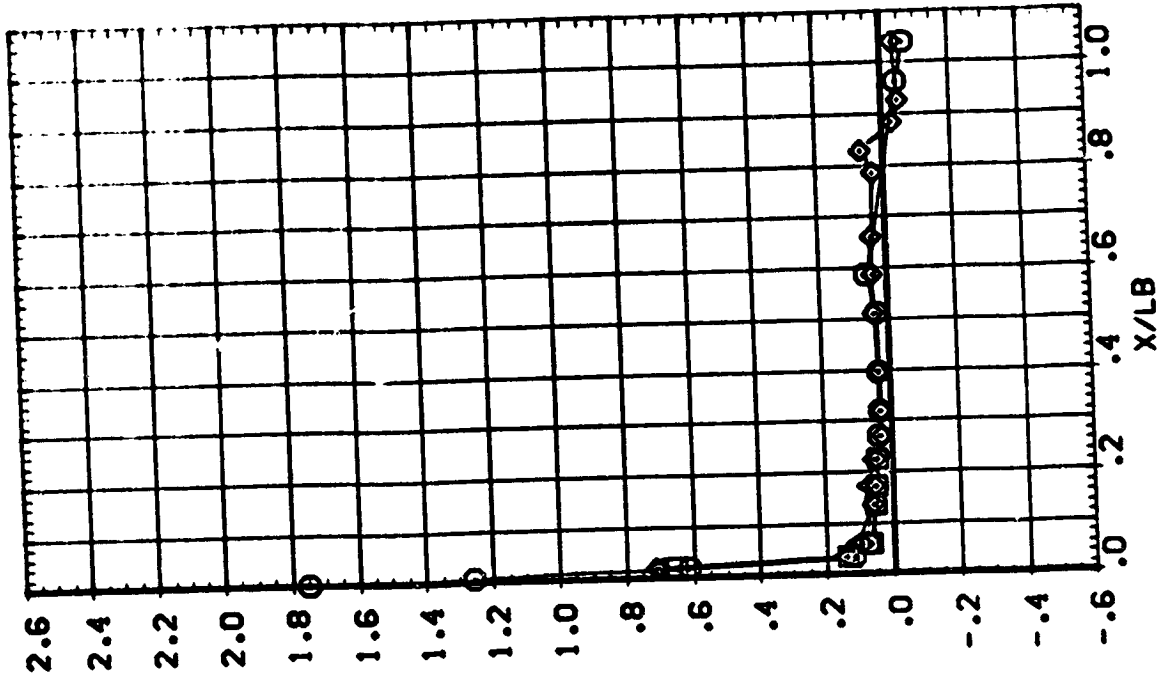
LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

SYMBOL
 ○
 △
 ▽

PA: .000
 20.000
 40.000
 55.000

ALPHA MACH
 -0.020 3.502
 5.170

PARAMETRIC VALUES
 .000 .000 .000
 BETA RUDDER RUDFLR
 ELEVON 40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES



ORBITER FUSELAGE (RBQ801)

AMES 87-707 0A12 02A

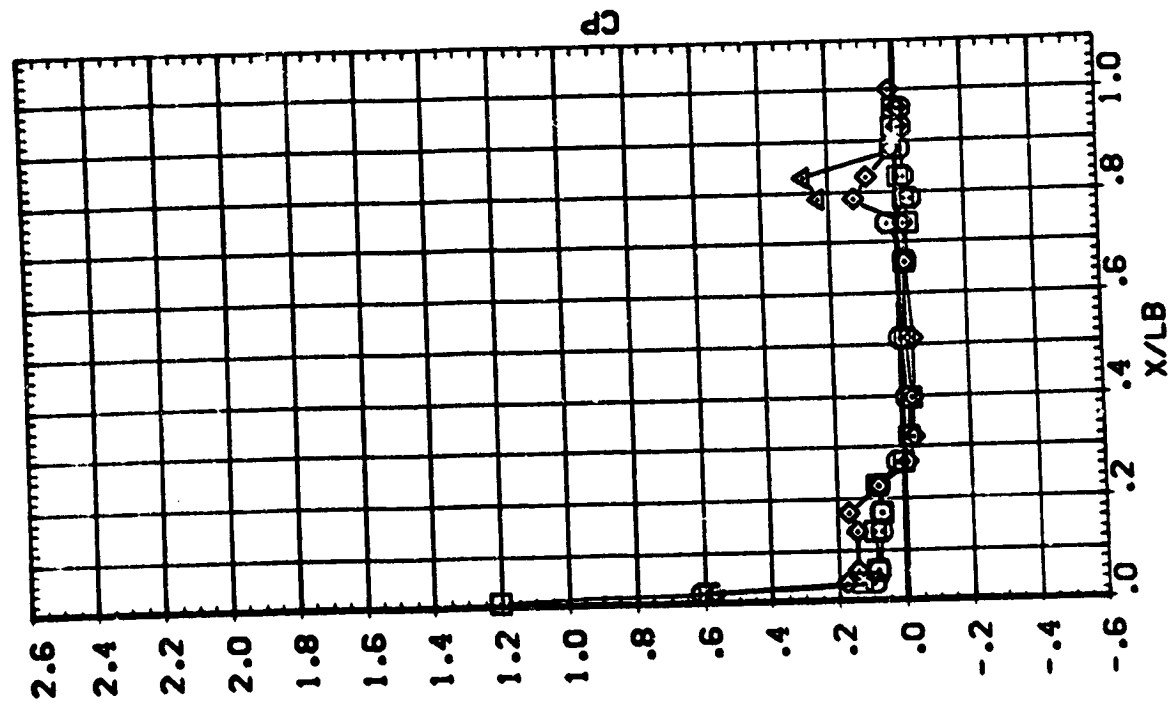
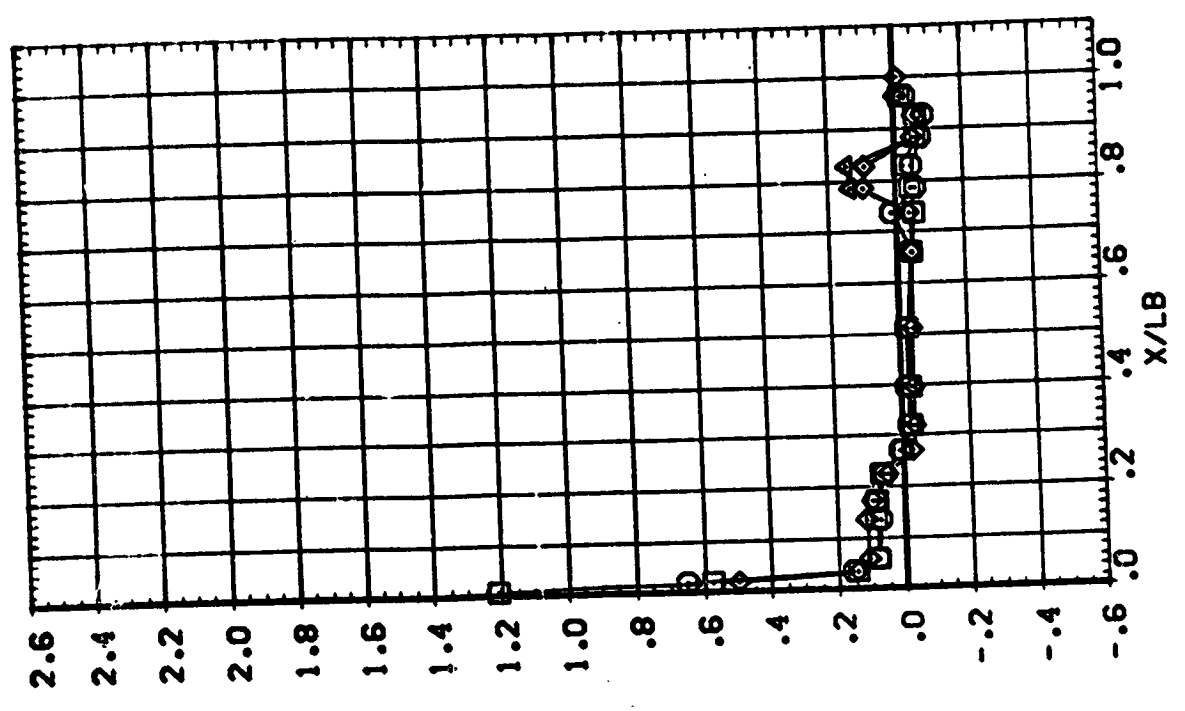
SYMBOL
□
◇
△

PMI
70.000
90.000
120.000
135.000

ALPHA
-0.020
5.170

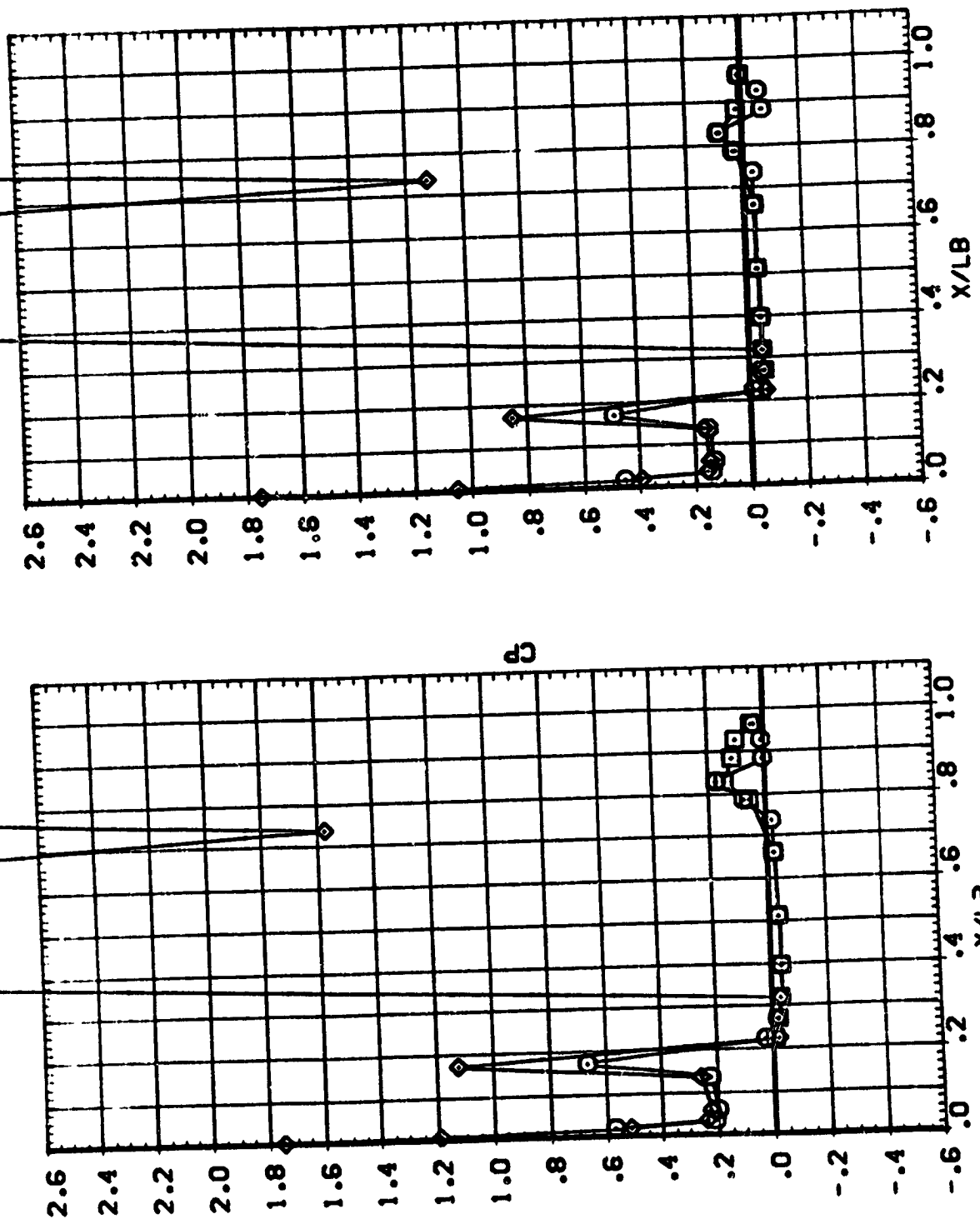
MACH
3.502

PARAMETRIC VALUES
BETA
ELEVON
.000
.000
RUDER
RUDFLR
.000
40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

SYMBOL \square \diamond
 PH: 150.000
 165.000
 180.000
 AVES 87-707 OA:2
 ALPHA .020
 MAC 3.502
 02A
 ORBITER FUSELAGE (R80801)
 BETA ELEVON
 PARAMETRIC VALUES
 .000
 .000
 .000
 .000
 40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

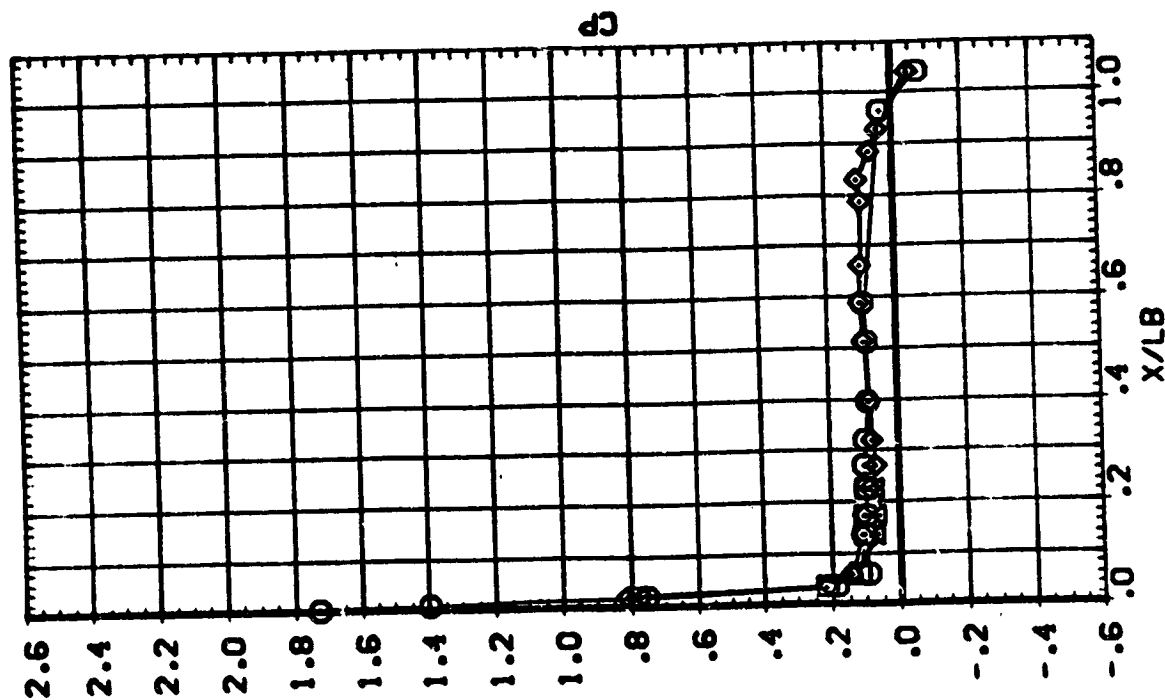
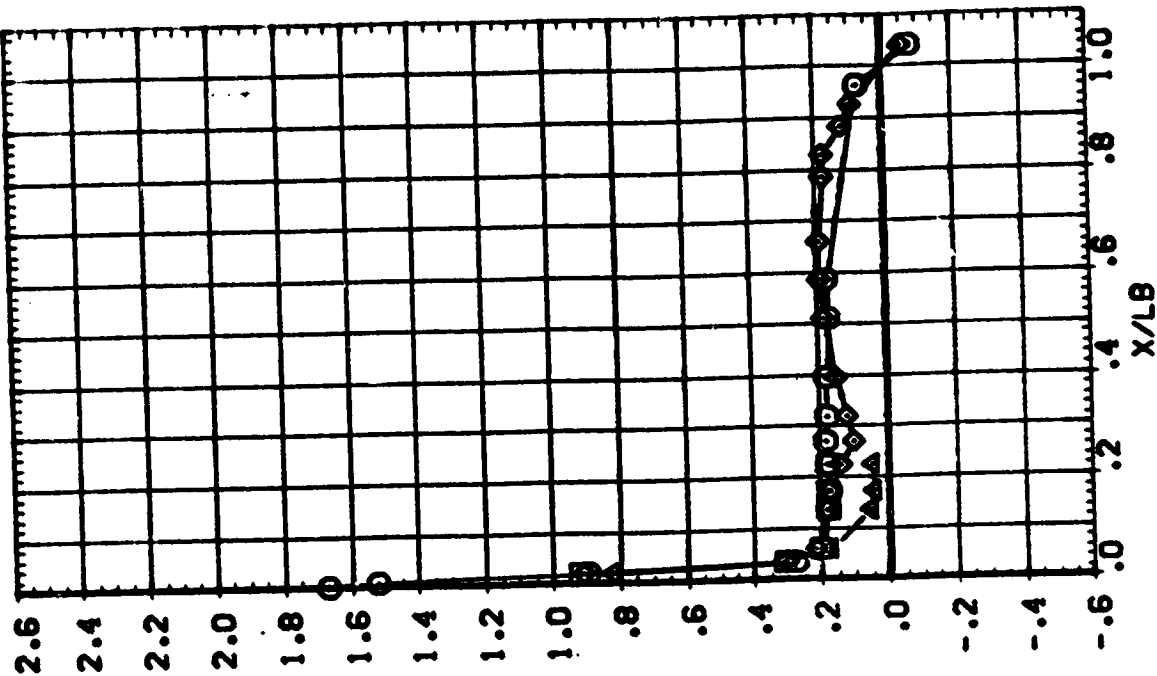
ORBITER FUSELAGE (RB0801)

AMES 87-707 0A12 02A

SYMBOL
○ □ ◇ △

PHI: .000 10.130 3.502
20.000 15.050
40.000
55.000

PARAMETRIC VALUES
BETA ELEVON .000 .000 .000
RUDER .000
RUFLR 40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

SYMBOL
O
□
◇
△

QAL
70.000
90.000
170.000
35.000

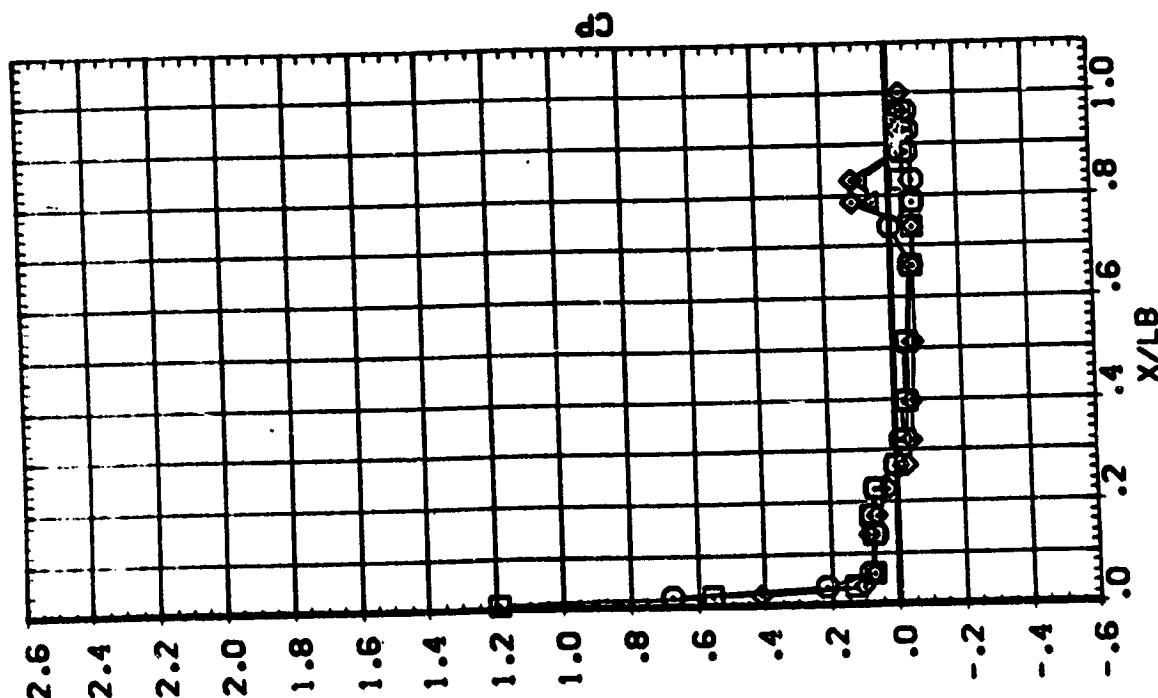
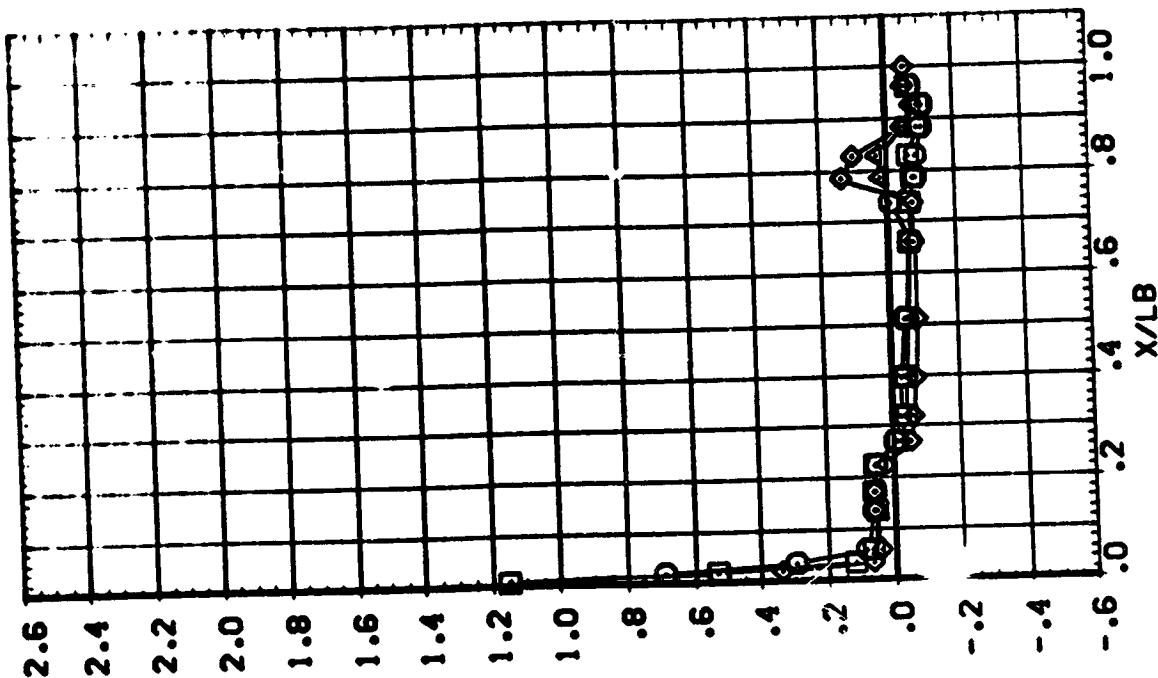
ALPHA
10.130
15.050

MACH
3.502

PARAMETRIC V/L AS

BETA
ELEVON

.000
.000
R.03
R.03
45.000
45.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

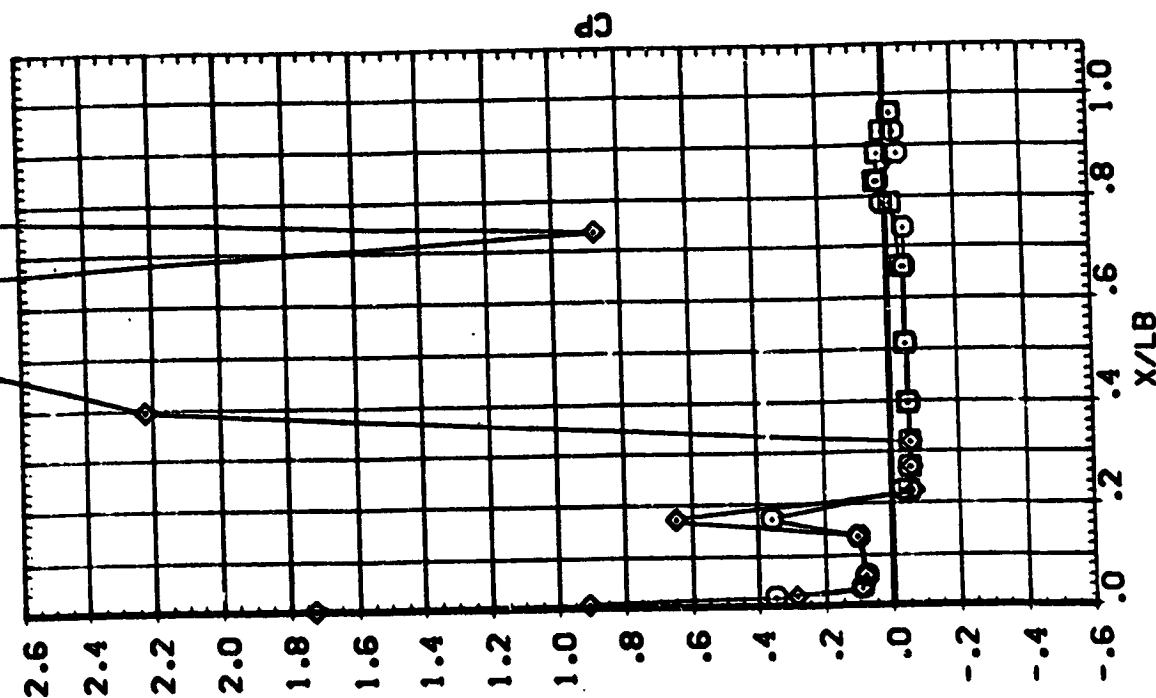
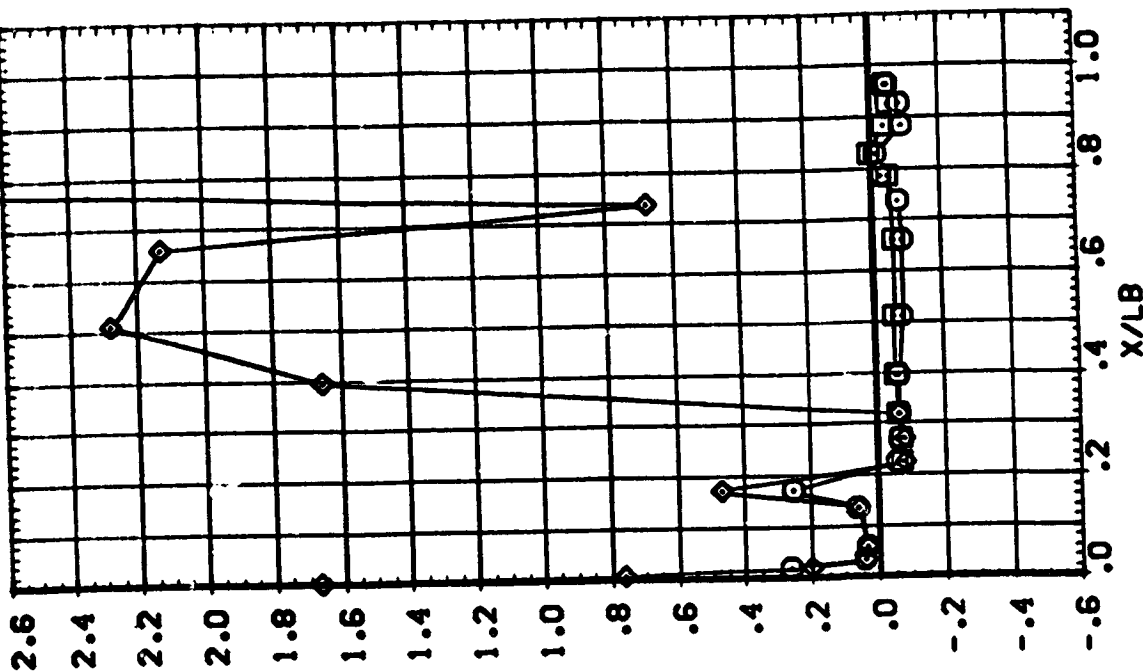
ORBITER FUSELAGE (R8QB01)

PARAMETRIC VALUES
 BETA .000
 ELEVON .000
 40.000

SYMBOL
 □
 ◇

AMES 87-707 0A12 02A

ALPHA 10.130
 MACH 3.502
 15.050
 150.000
 65.000
 80.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RB0901)

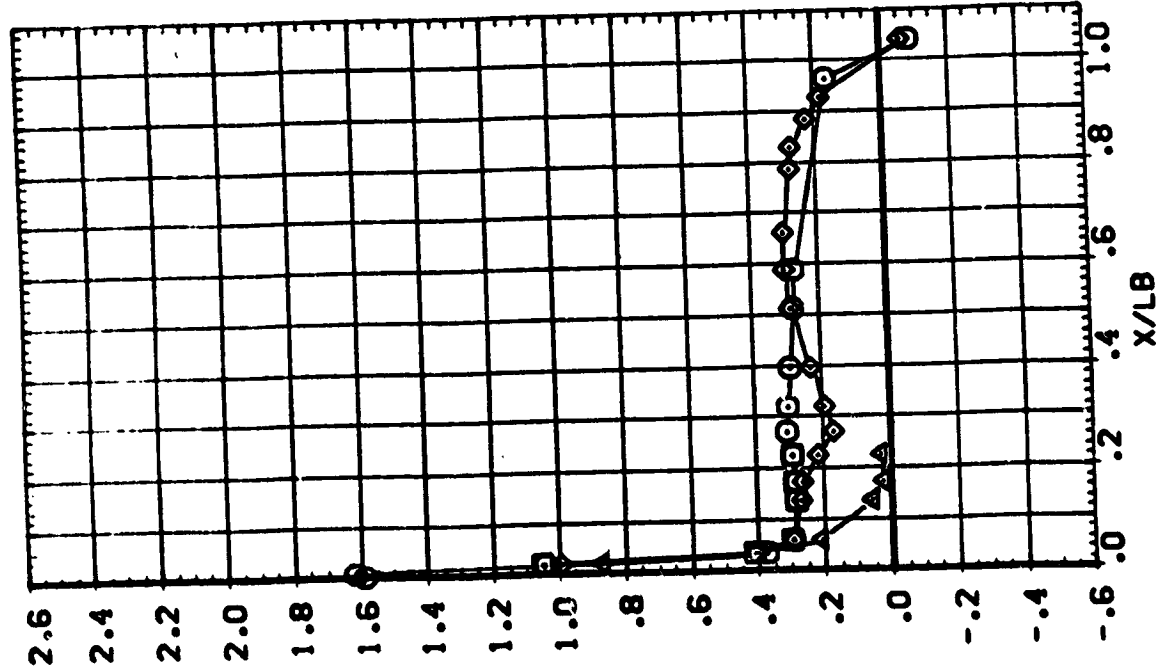
AMES 87-707 GA:2 02A

SYMBOL
 □ □ □ □
 ○ ○ ○ ○
 △ △ △ △

PH: .000
 20.000
 40.000
 55.000

ALPHA 20.020 MACH 3.502

PARAMETRIC VALUES
 BETA .000
 ELEVON .000
 RJOER 40.000
 RJOFR 40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

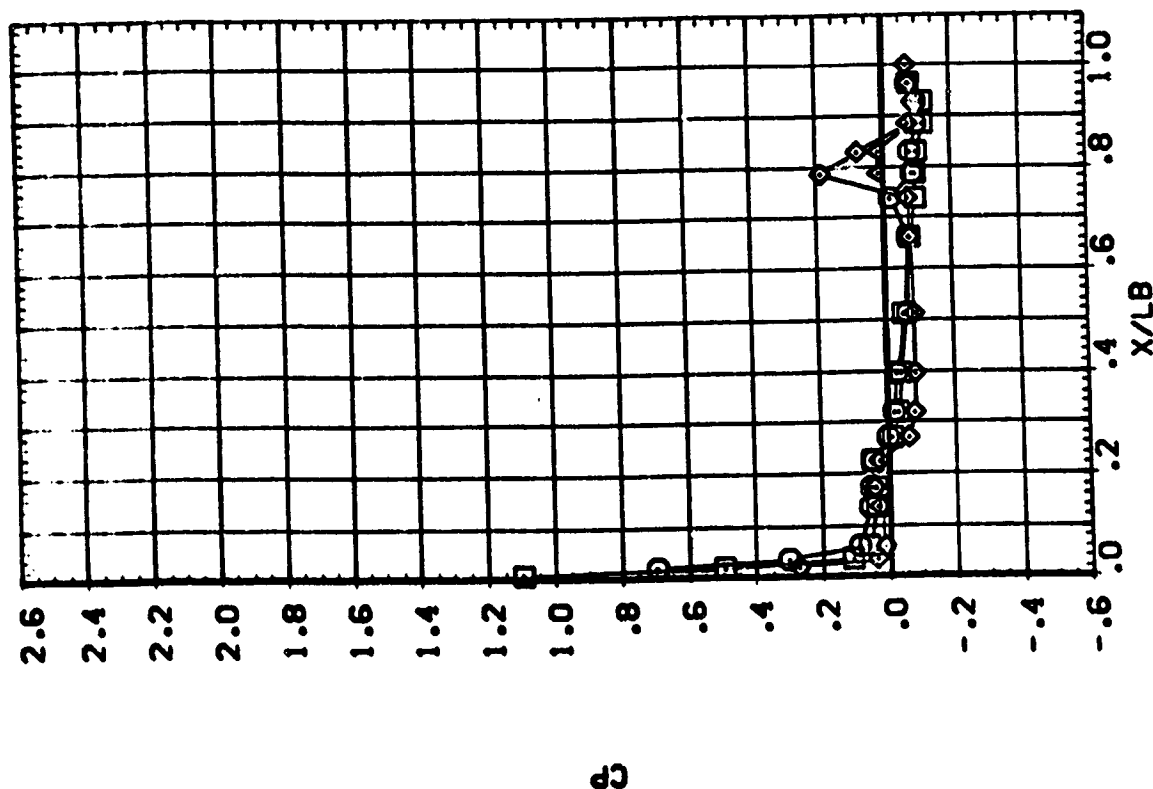


AVES 87-707 CA:2 C2A ORBITER FUSELAGE (R80901)

PARAMETRIC VALUES
BETA .000
ELEVON .000
RJOER .000
RJOFR 40.000

SYMBOL
70.000
90.000
120.000
135.000

ALPHA 26.020
MACH 3.502



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (R83801)

AVES 87-7C7 CA:2 C2A

SYMBOL
—
=
◇

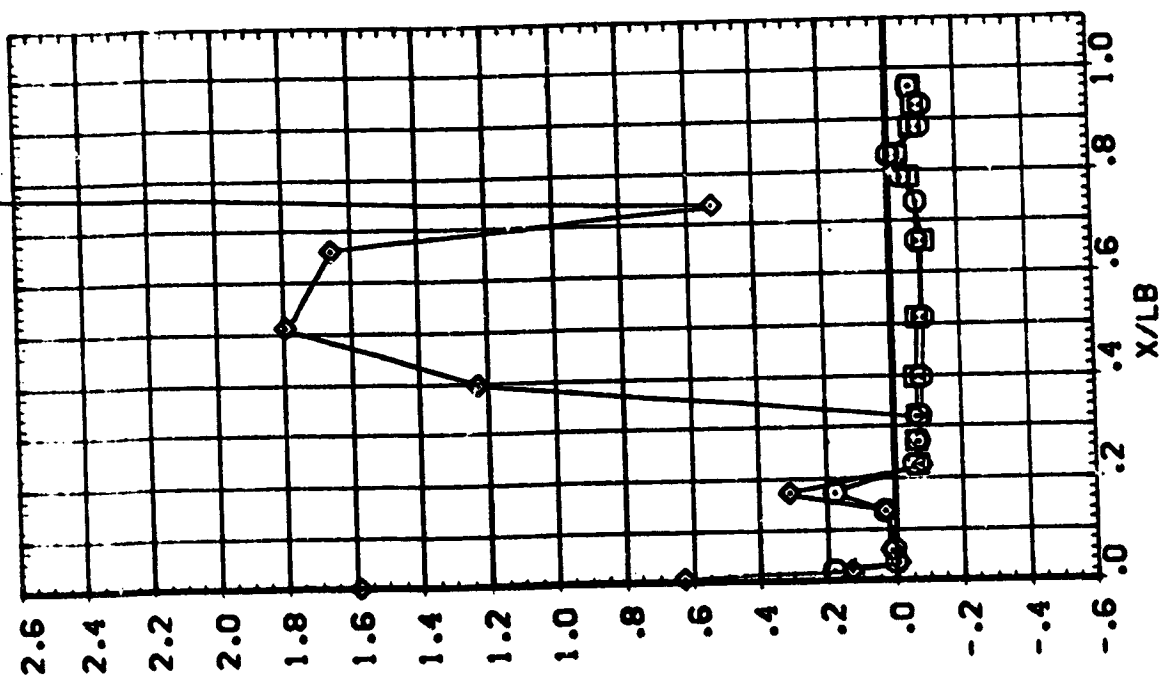
Q: 150.000
165.000
180.000

A: 20.070
MACH: 3.507

PARAMETRIC VALUES
Q: 150.000
Q: 165.000
Q: 180.000

BETA
ELEVON

Q: 150.000
Q: 165.000
Q: 180.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (R80305)

AVES 87-707 0A:2 C2A

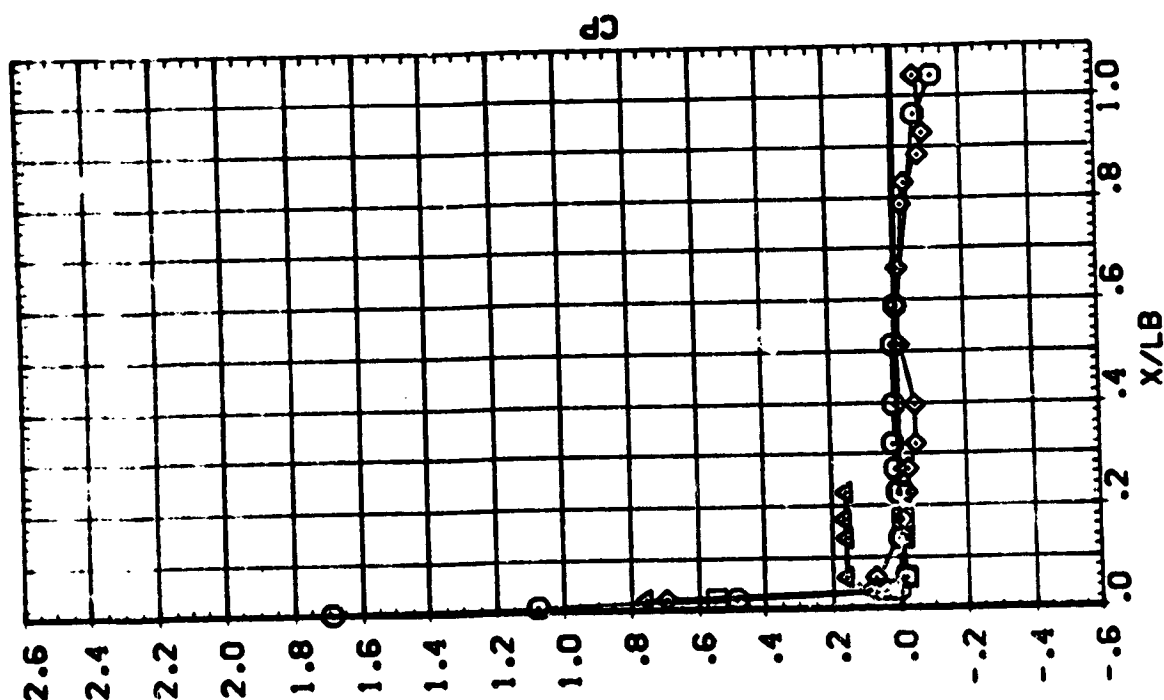
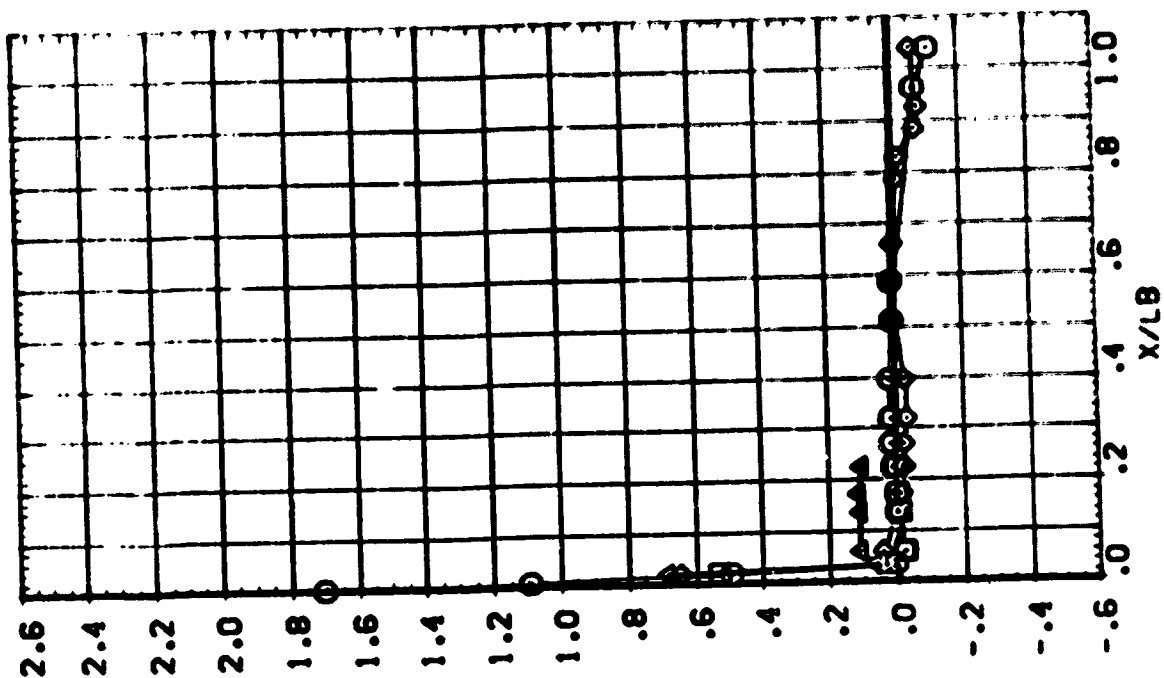
PARAMETRIC VALUES
 .000 .000 .000
 .000 .000 .000
 .000 .000 .000

ALPHA
 ELEVON

BETA
 -6.443
 3.300

WACH
 2.498

SYMBOL
 ○
 ◇
 △



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (R33305)

AVES 87-707 CA:2 C2A

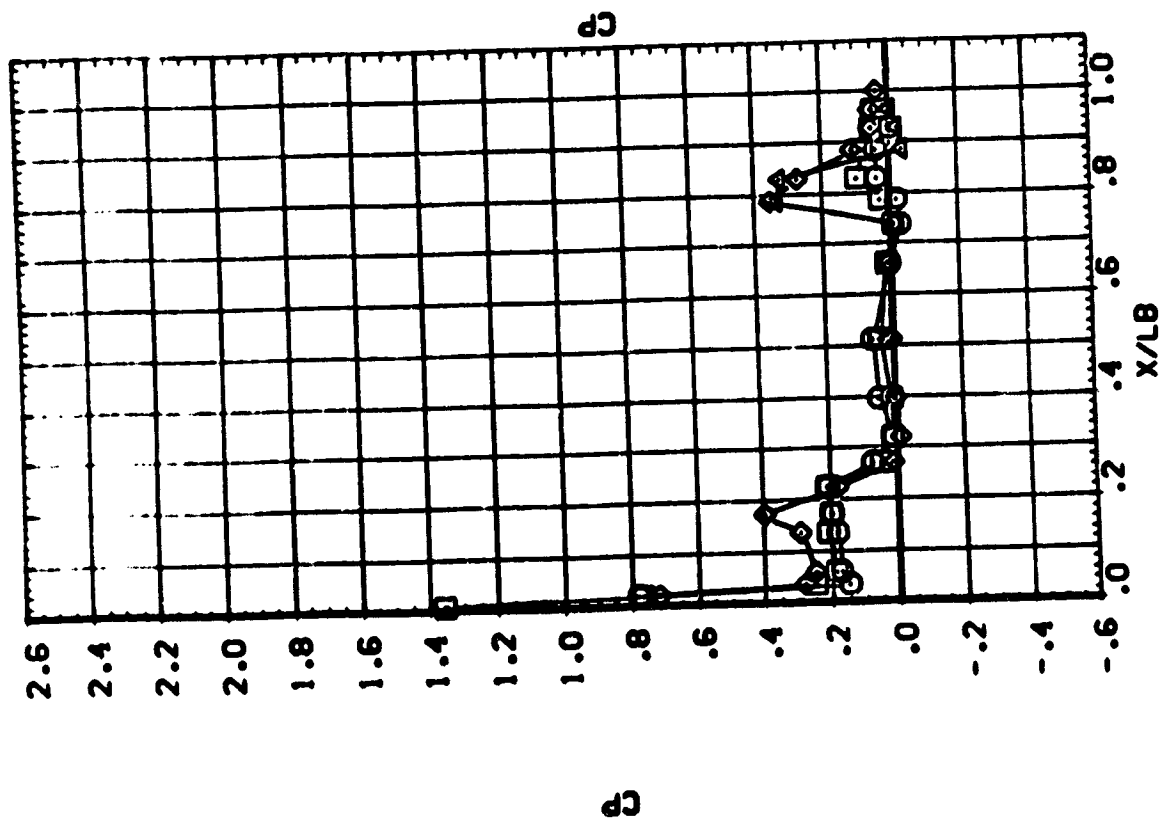
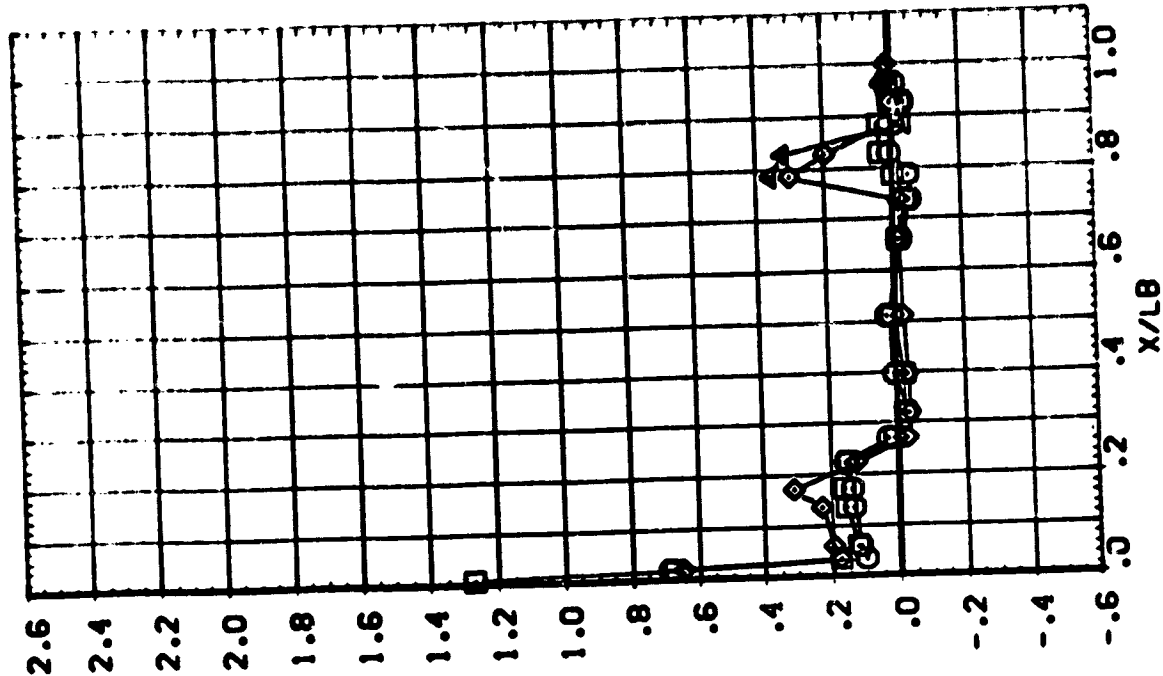
SYMBOL
○
◇
△

70.000
90.000
120.000
130.000

BETA
-6.440
-3.300

MACH
2.498

PARAME: R/C VA, IS
ALPHA
ELEVON
.000 .000
.000 .000
70.000 40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (R8C805)

C2A

AVES 87-707 CA:2

SYMBOL
○ ○ ○

MAX
:52.000
:60.000
:60.000

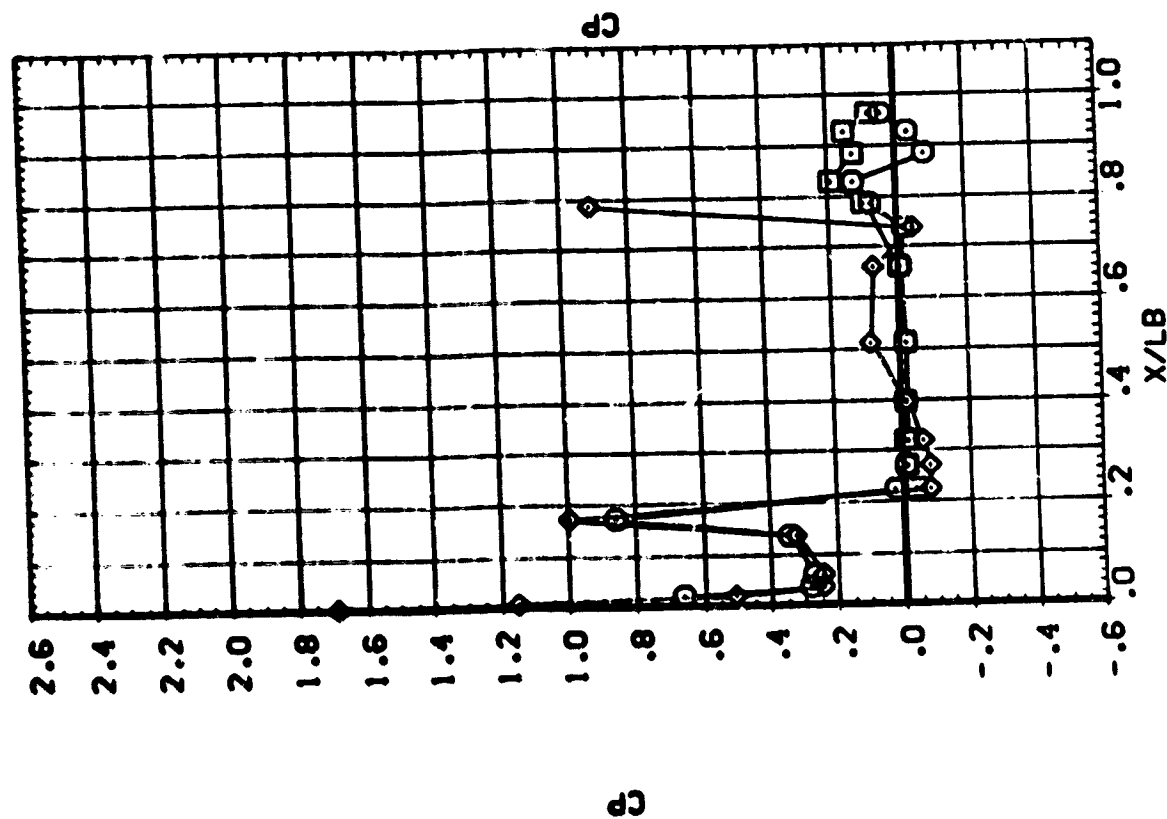
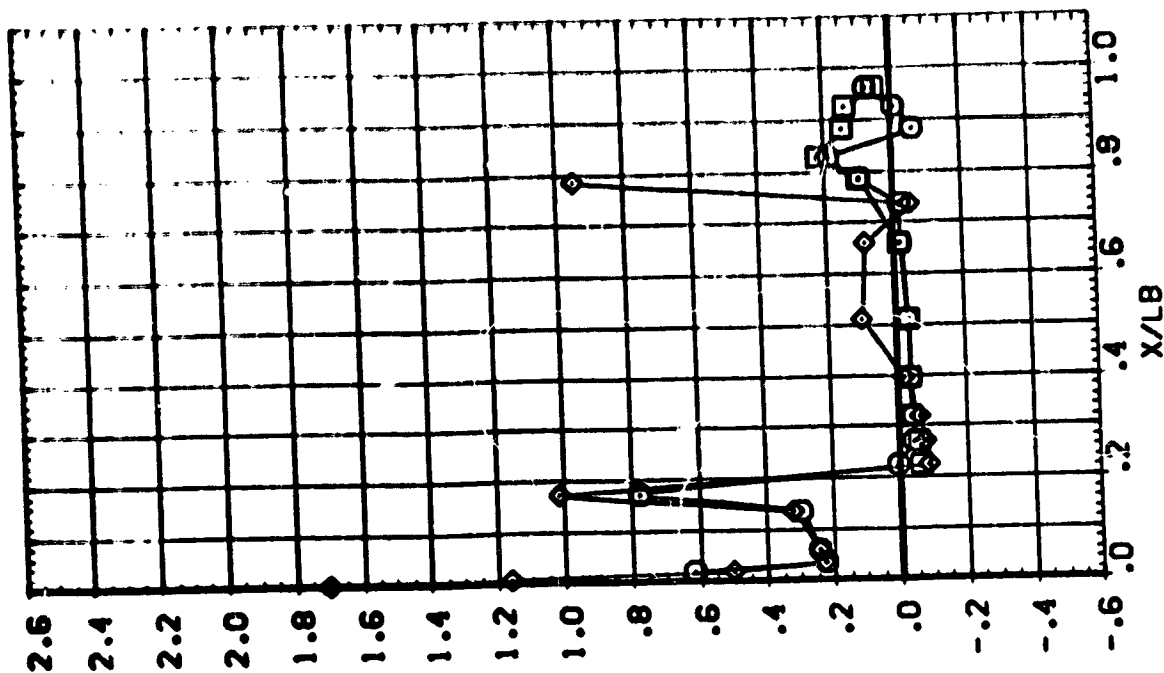
MIN
-6.440
-3.300

C2A

AVES 87-707 CA:2

ALPHA
ELEVON

PARAMETER VALUES
:300 :2.000 :2.000
:300 :2.000 :2.000

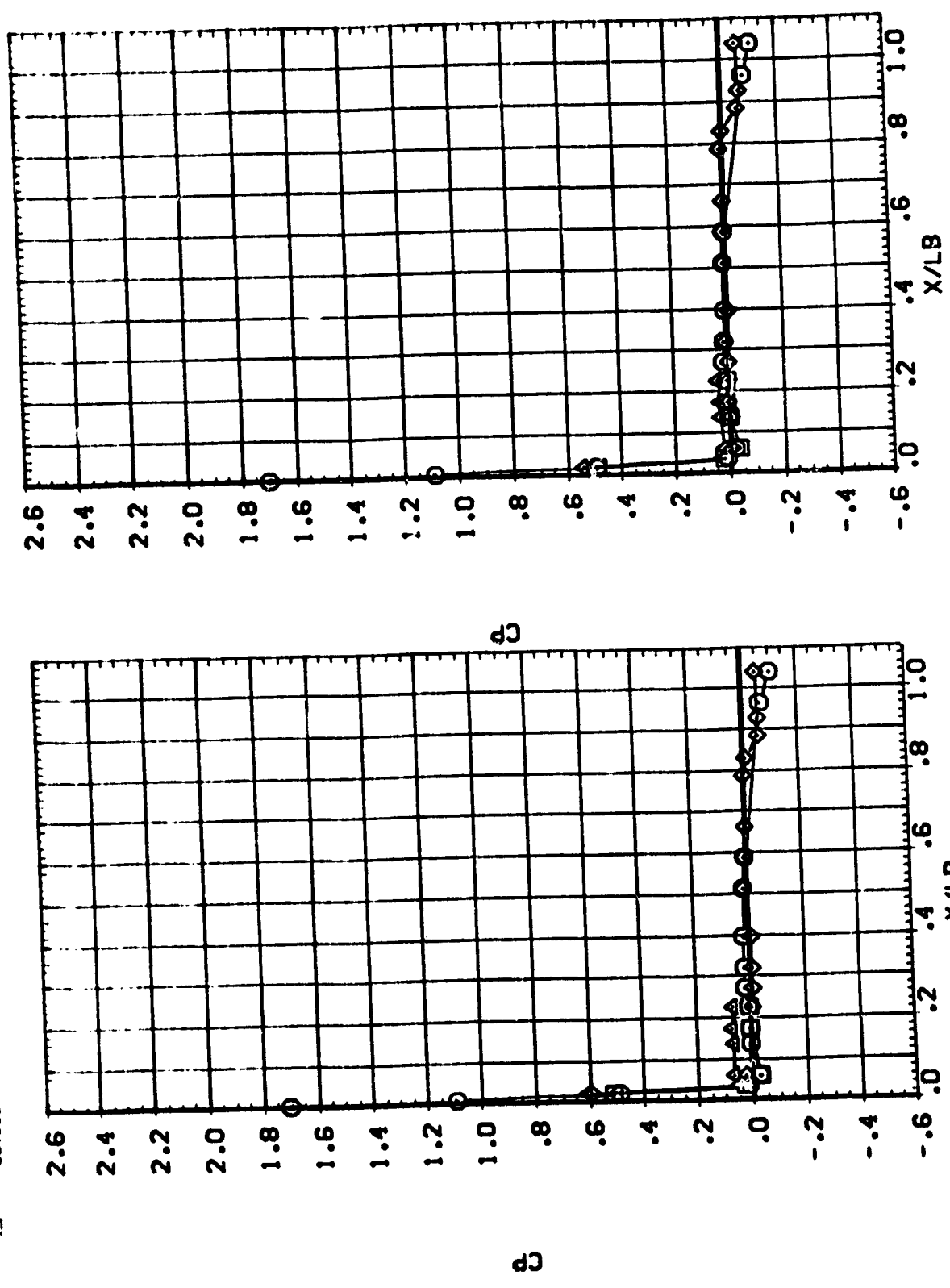


LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

SYMBOL
 ○
 ◇
 △

BETA MACH
 .000 2.498
 20.000 3.060
 40.000
 55.000

PARAMETRIC VALUES
 ALPHA .000 RUDER 20.000
 ELEVON .000 RUDFLR 40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

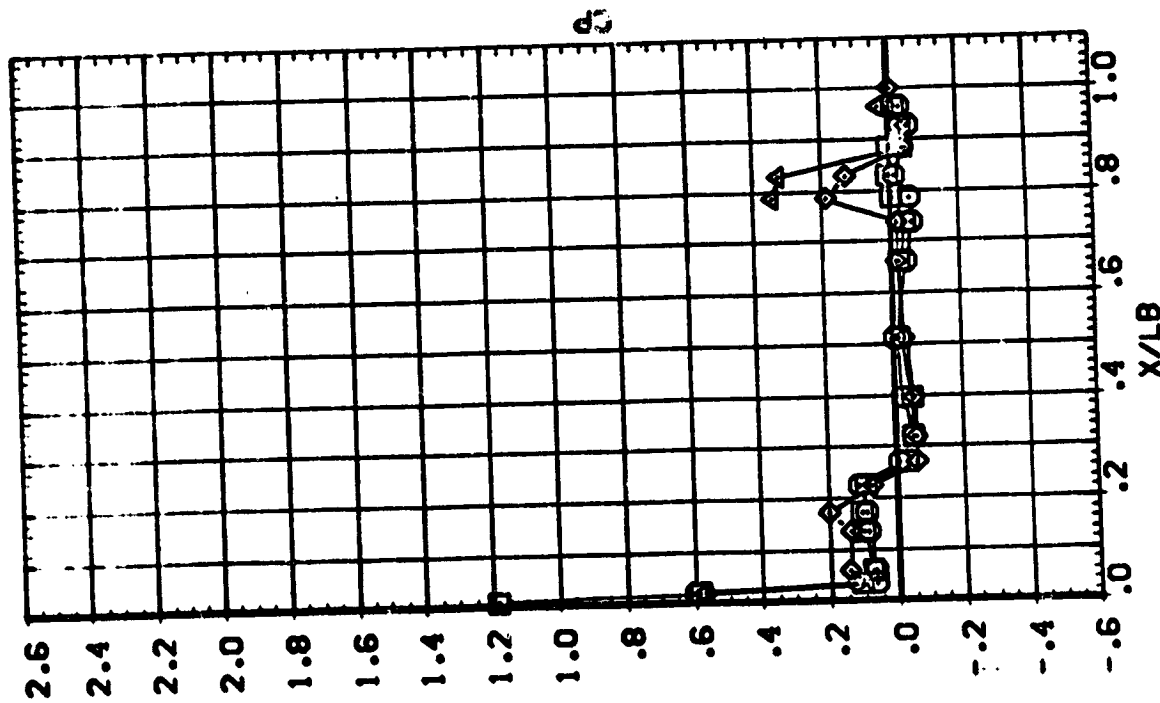
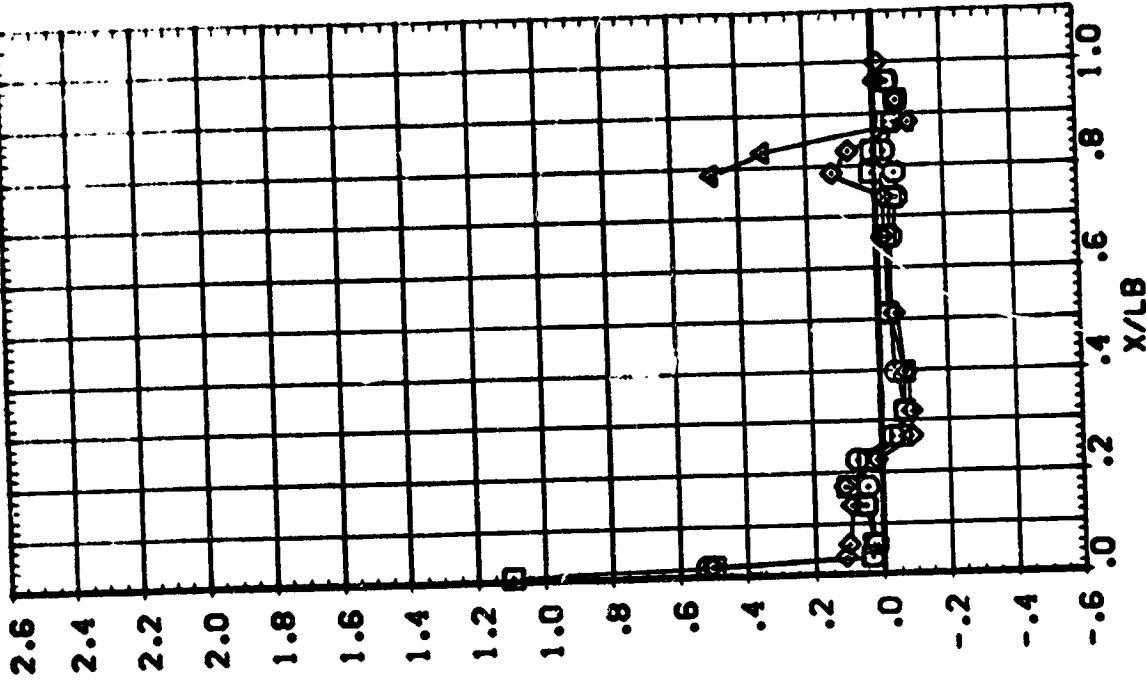
SYMBOL
 O
 I
 D
 Δ

PA: 70.000
 90.000
 120.000
 150.000

BE"A 0.160
 3.560

WACH 2.498

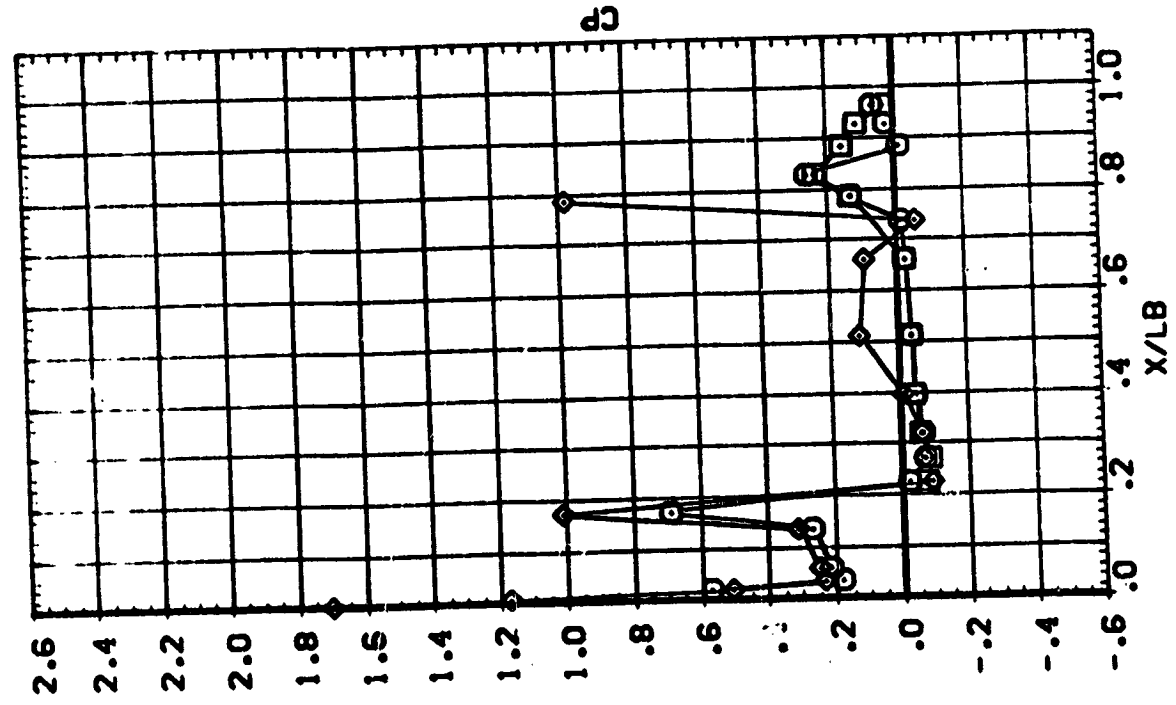
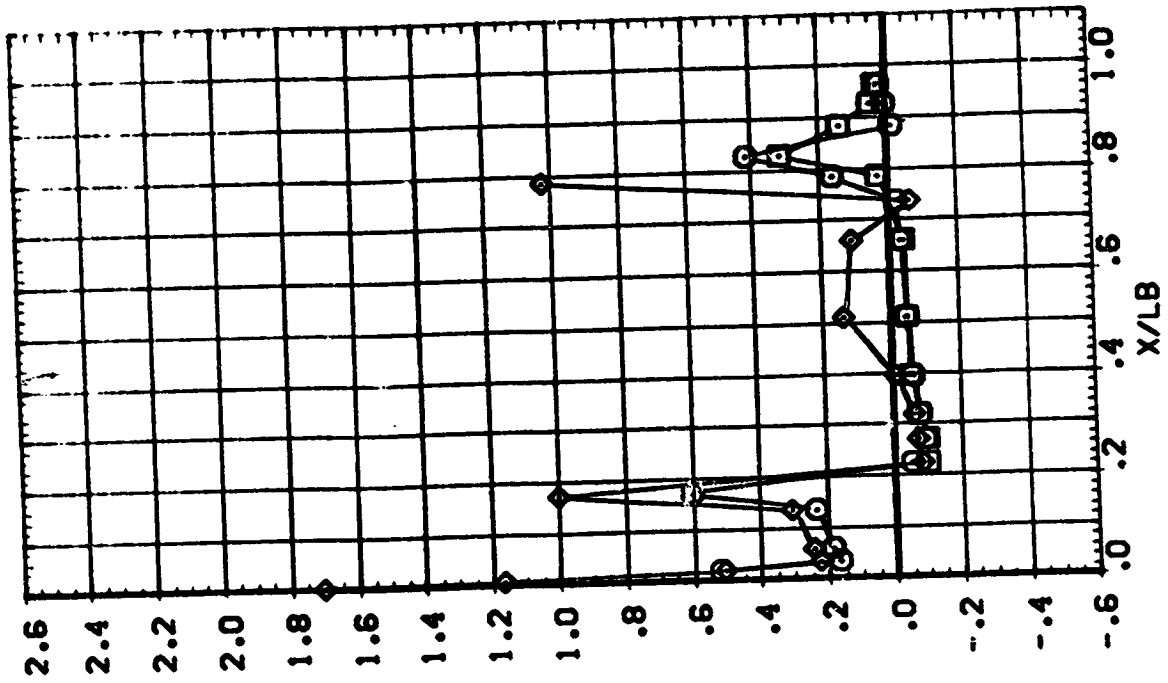
PARAMETRIC VALUES
 ALPHA .000
 ELEVON .000
 RUDDER 20.000
 RUDDER 40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

PARAMETRIC VALUES
 ALPHA .000
 ELEVON .000
 RUDER 20.000
 RUFLR 40.000

SYNTH
 150.000
 165.000
 180.000



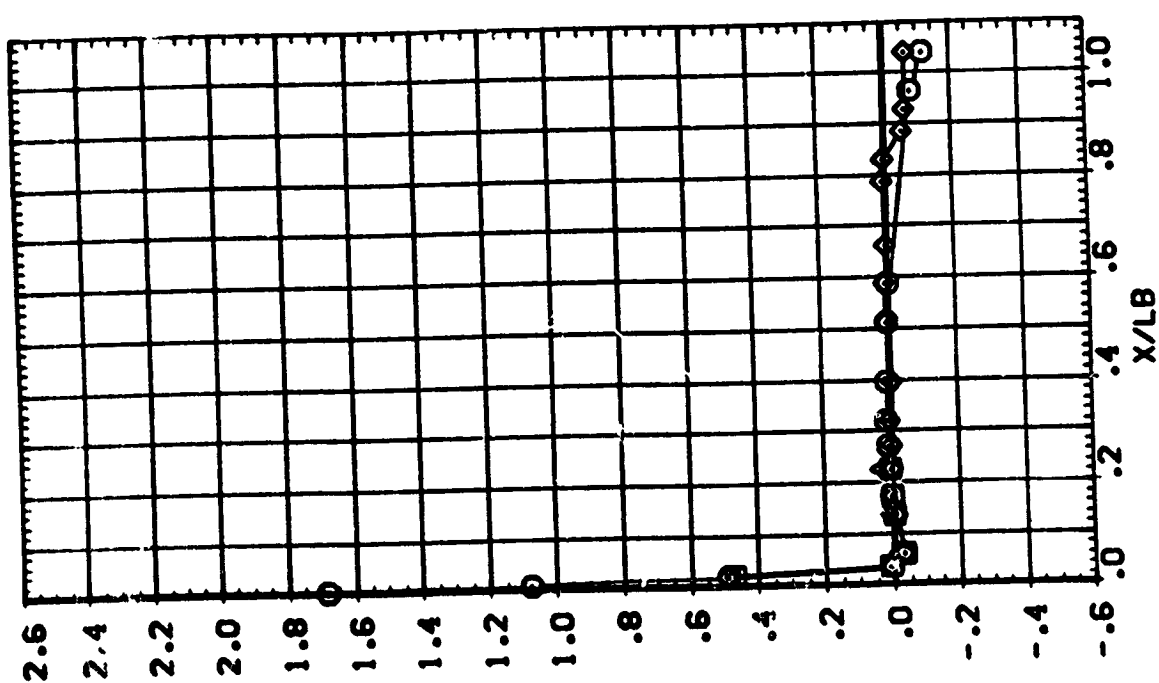
LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

AMES 87-707 3A12 02A

PARAMETRIC VALUES
 ALPHA .000
 ELEVON .000
 ROLLER -20.000
 ROLLER 40.000

BETA 6.250
 MACH 7.450

SYMBOL
 P-1
 .000
 20.000
 40.000
 55.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBQB05)

AVES 87-707 0A12 02A

SYMBOL
□
◇
△

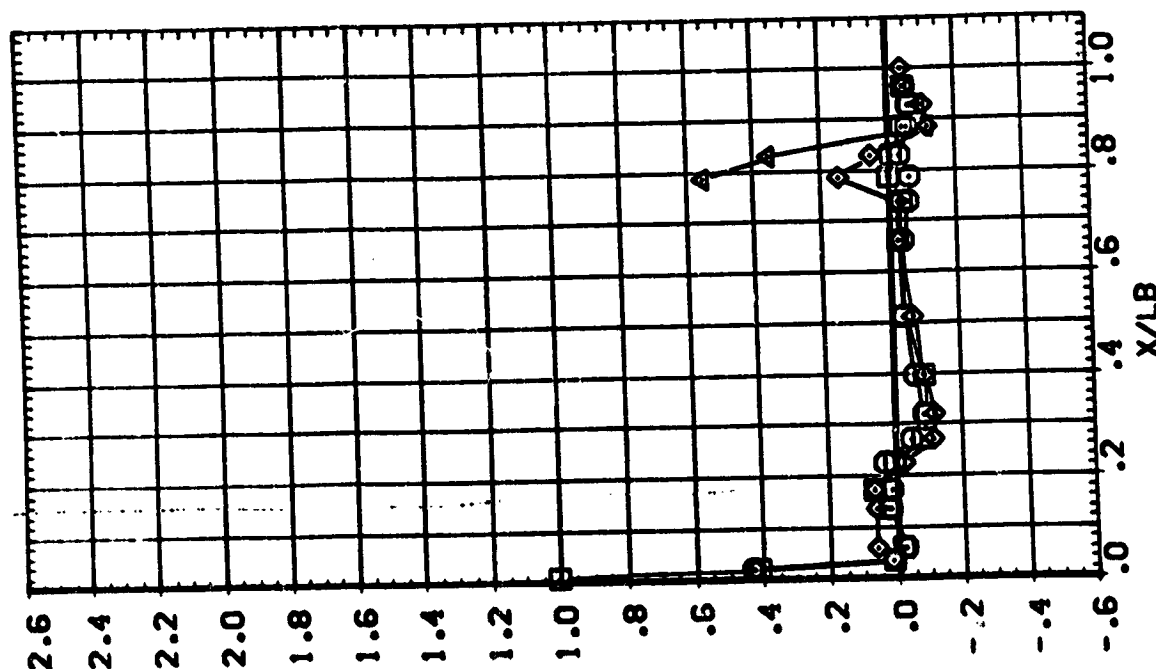
PMI
72.000
90.000
120.000
135.000

BETA
6.250

MACH
2.498

PARAMETRIC VALUES
.000 RUDER
.000 ROLLER
-20.000
40.000

ALPHA
ELEVON



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES



ORBITER FUSELAGE (RB0805)

AMES 87-707 CA12 02A

SYMBOL
□
○
◇

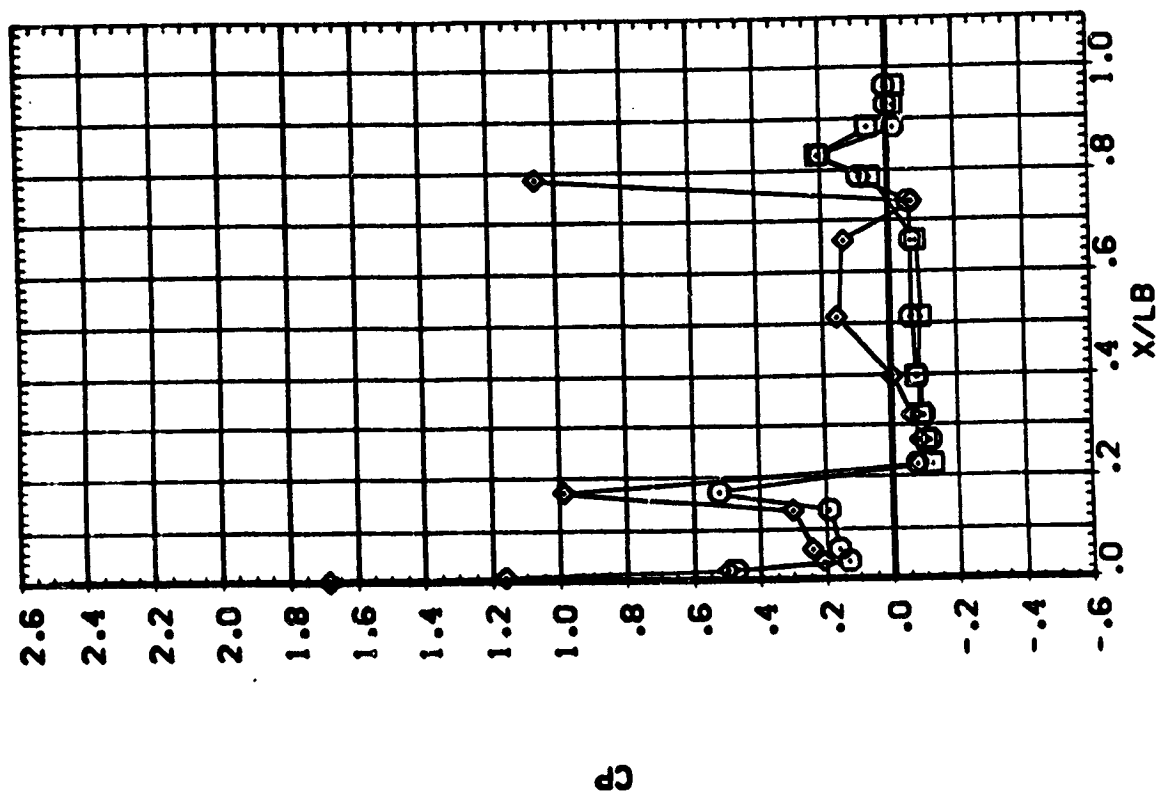
PHI 150.000
165.000
180.000

BETA 6.290

MACH 2.498

ALPHA
ELEVON

PARAMETRIC VALUES
.000 RUDER
.000 RUDFLR
-20.000
40.000



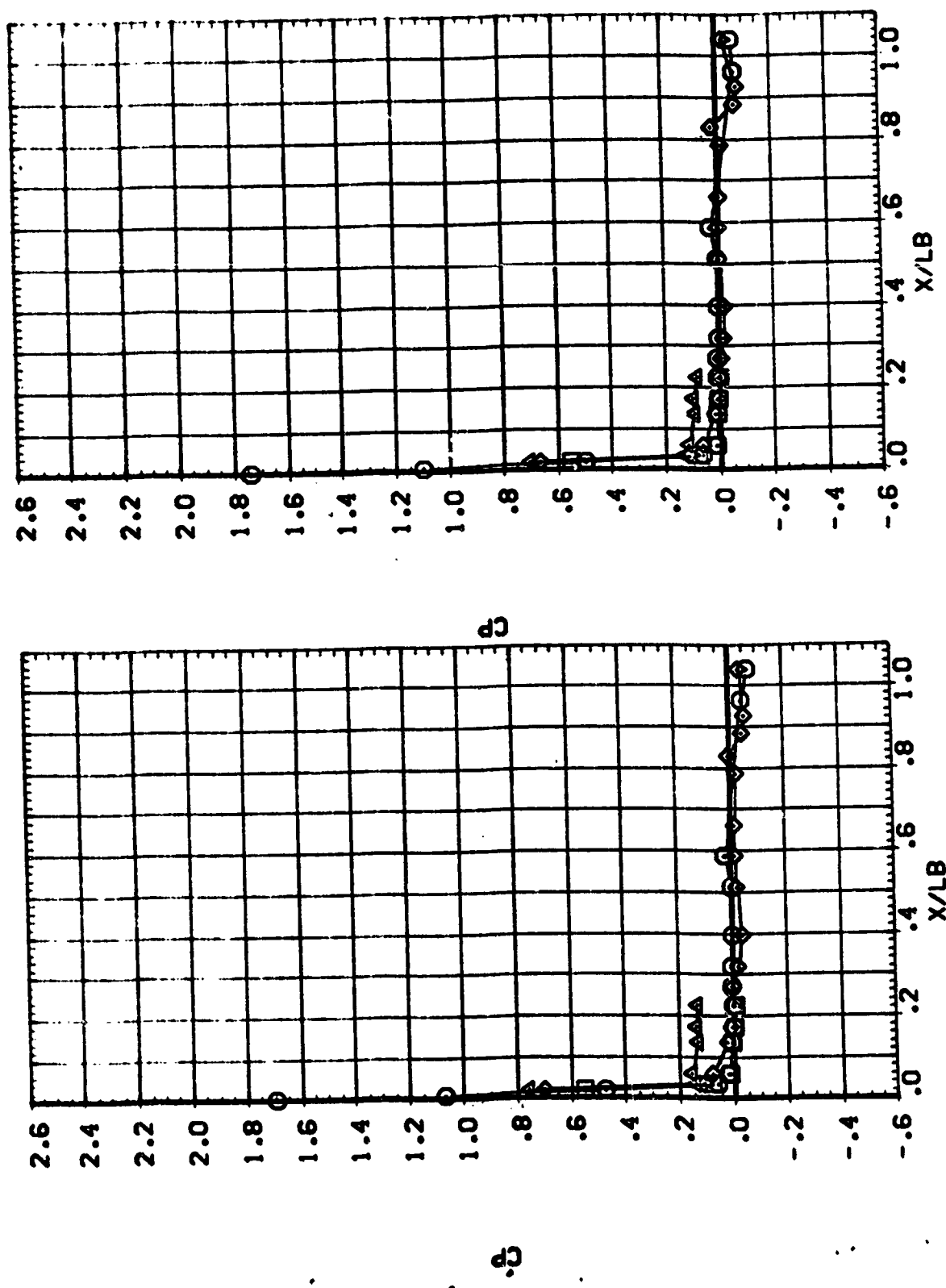
LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBQB05)

AVES 87-707 CA:2 02A

PARAMETRIC VALUES
 ALPHA ELEVON .000 .000
 SLODER -20.000
 RLOF LR 40.000

SYMBOL
 P-1
 BETA
 MACH
 -6.670 3.501
 -3.47C
 20.000
 40.000
 55.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBQB05)

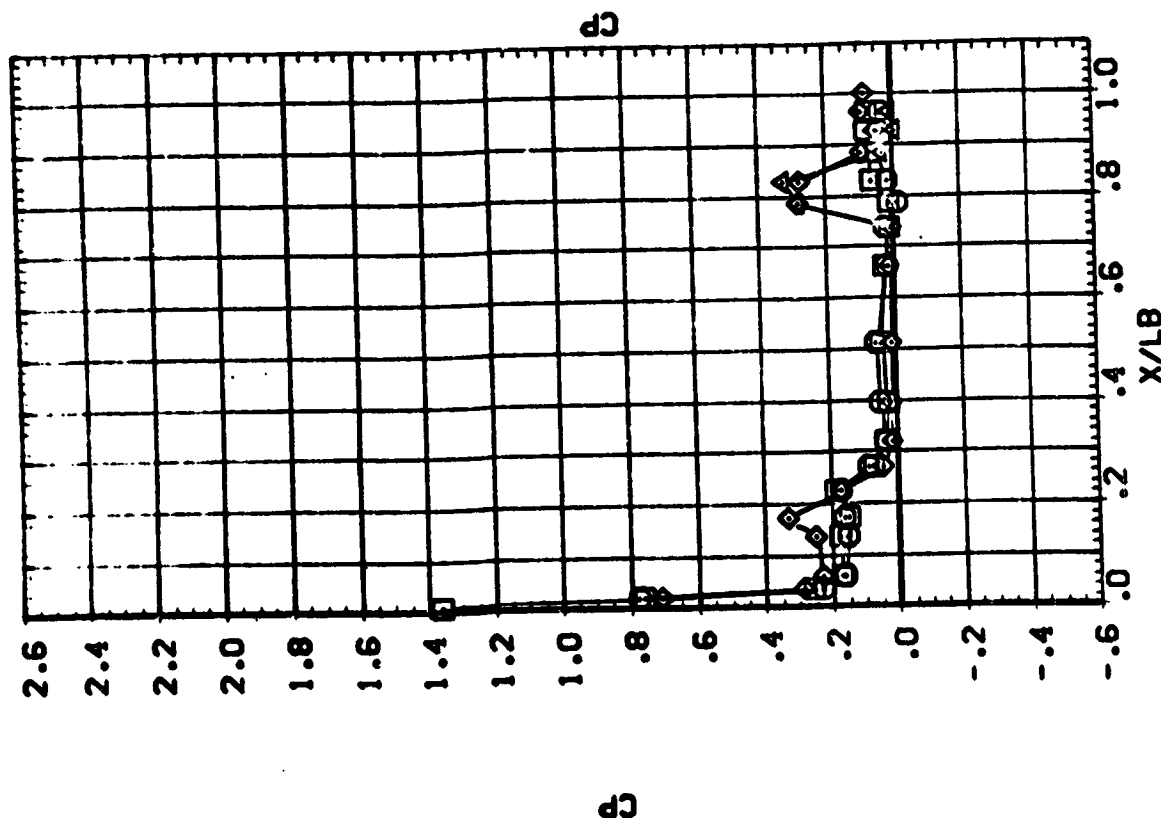
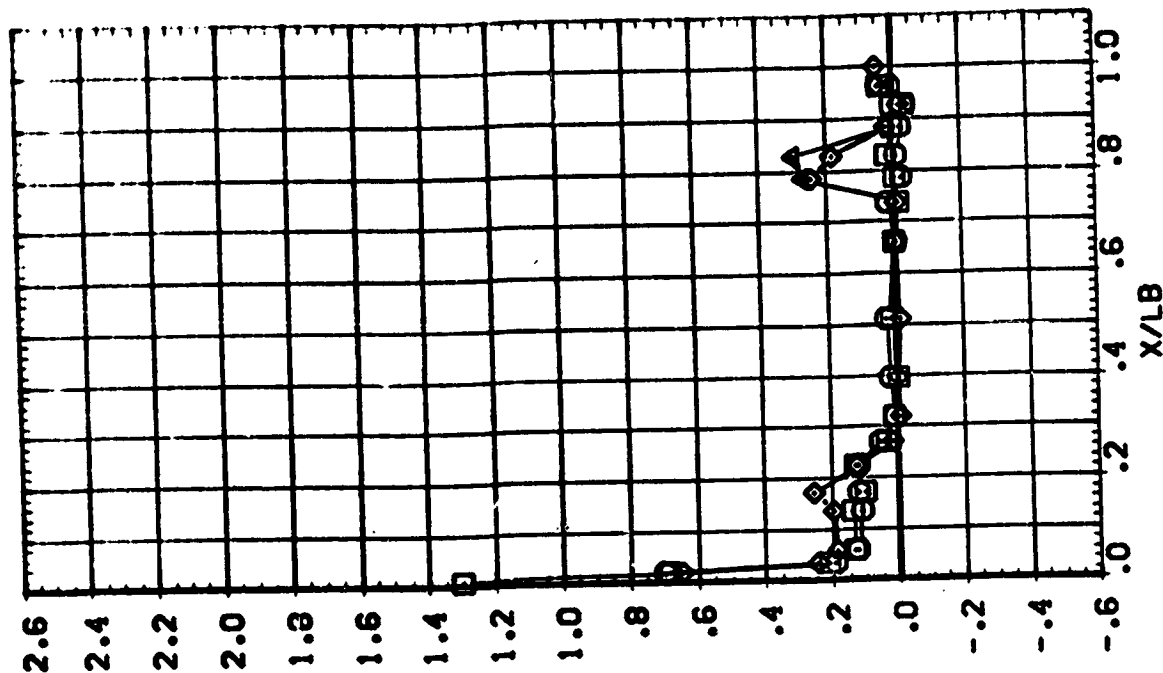
AVES 87-707 CA12 02A

SYMBOL
□ ○ △

PA: 75.000
90.000
.70.000
:35.000

BE TA MACH
6.670 3.501
3.420

PARAMETRIC VALUES
.000 RUDDER 70.000
.000 RUDDL 40.000
ALPHA
ELEVON



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (R80805)

AVES 87-707 3A12 02A

PARAMETRIC VALUES

ALPHA
ELEVON

RUDDER
RUDFLR

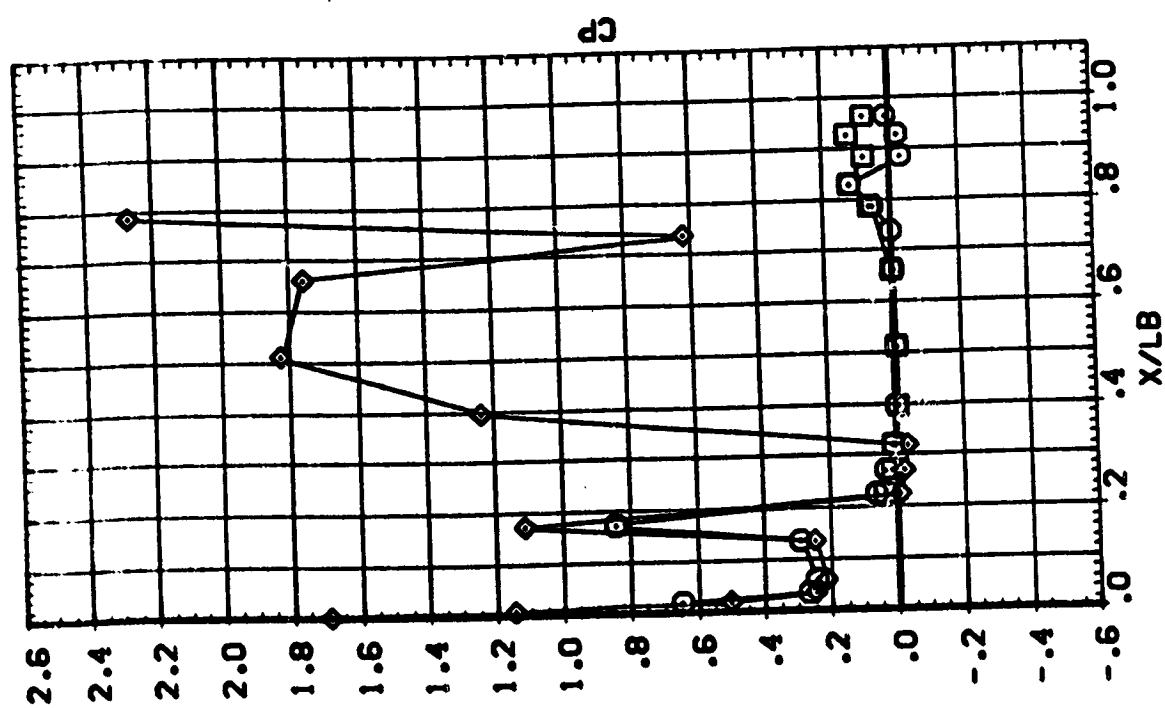
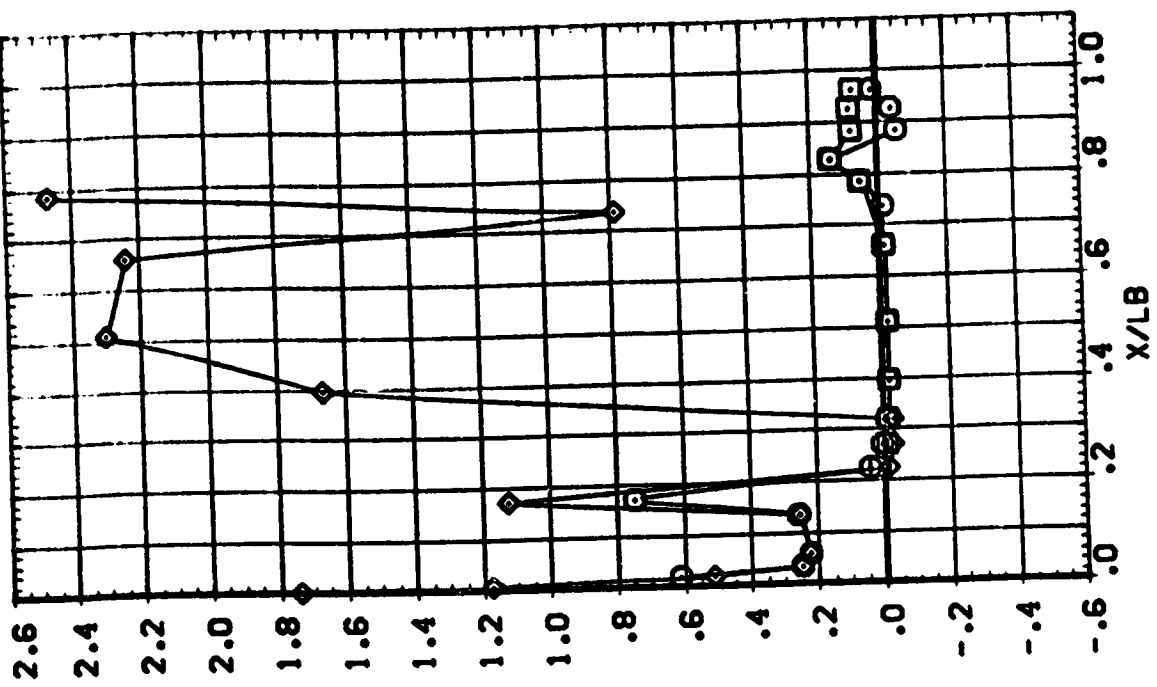
PA1
150.000
65.000
180.000

SYMB
O
□
◇

BETA
-5.670
-3.470

VACH
3.501

20.000
40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RB0805)

AVES 87-707 3A12 02A

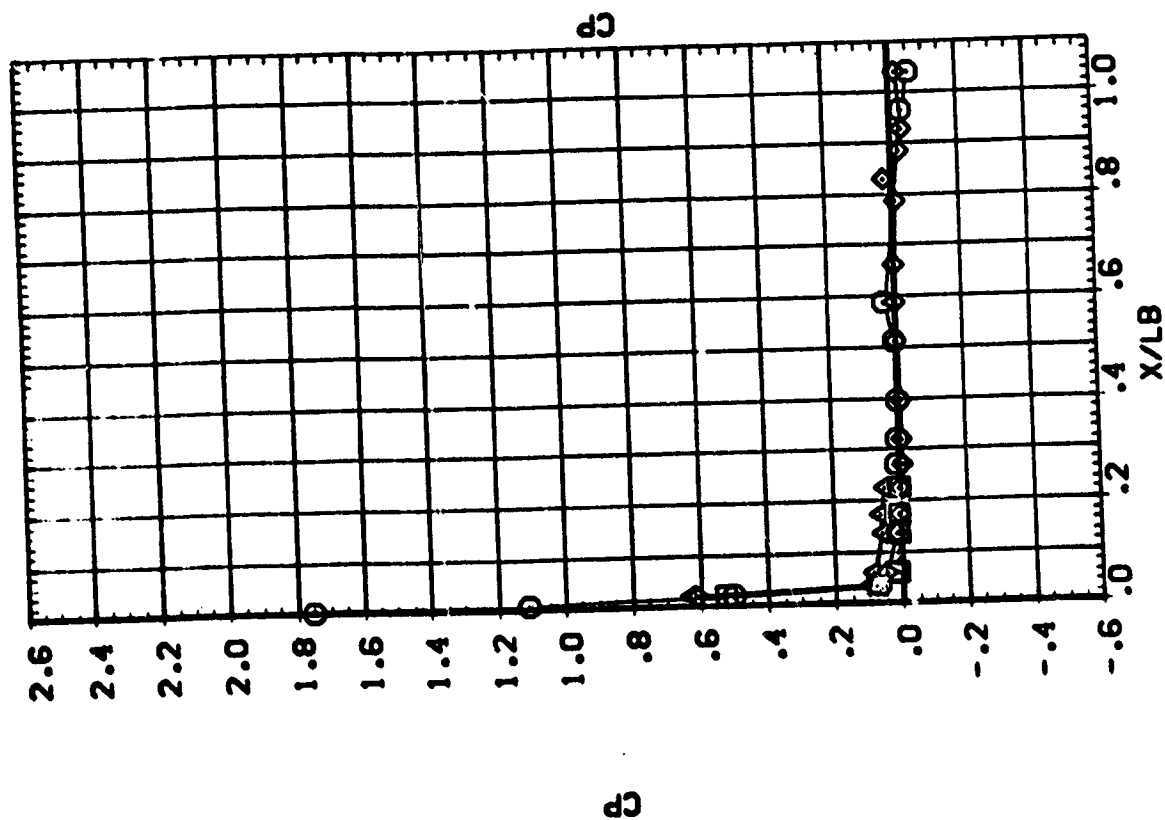
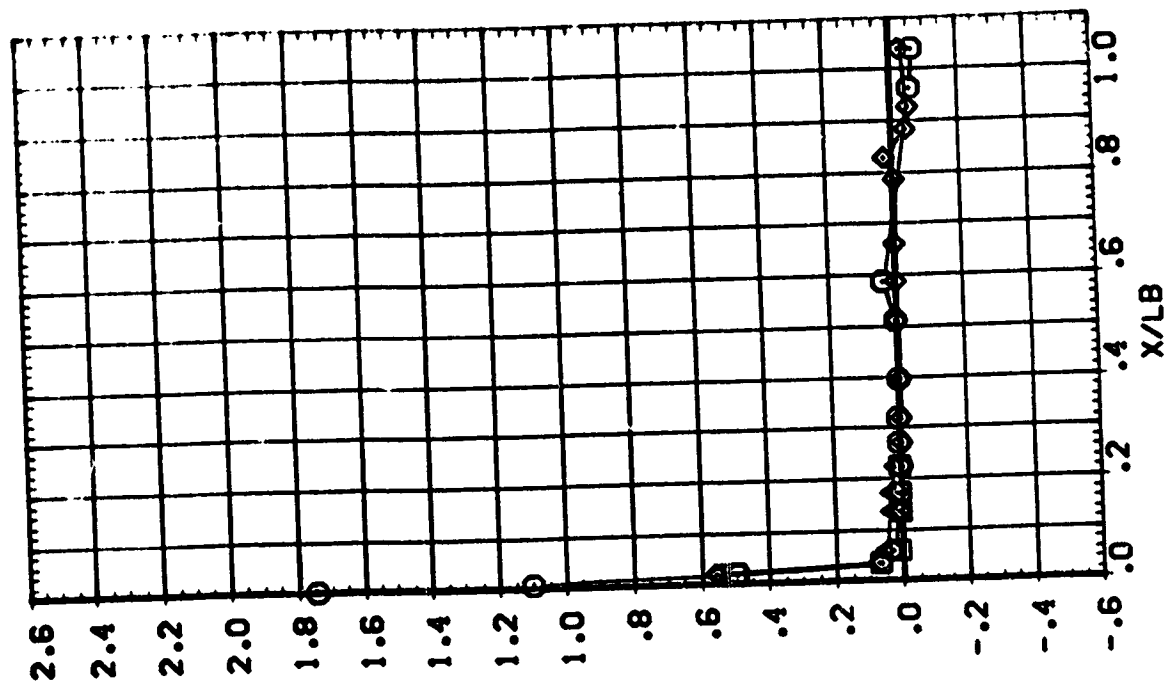
SYMBOL
 O
 I
 D
 A

PMI
 .000
 20.000
 40.000
 55.000

BETA
 .160
 3.180

MACH
 3.501

PARAMETRIC VALUES
 ALPHA
 ELEVON
 .000
 .000
 RJOE
 RJOE
 20.000
 40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBQ805)

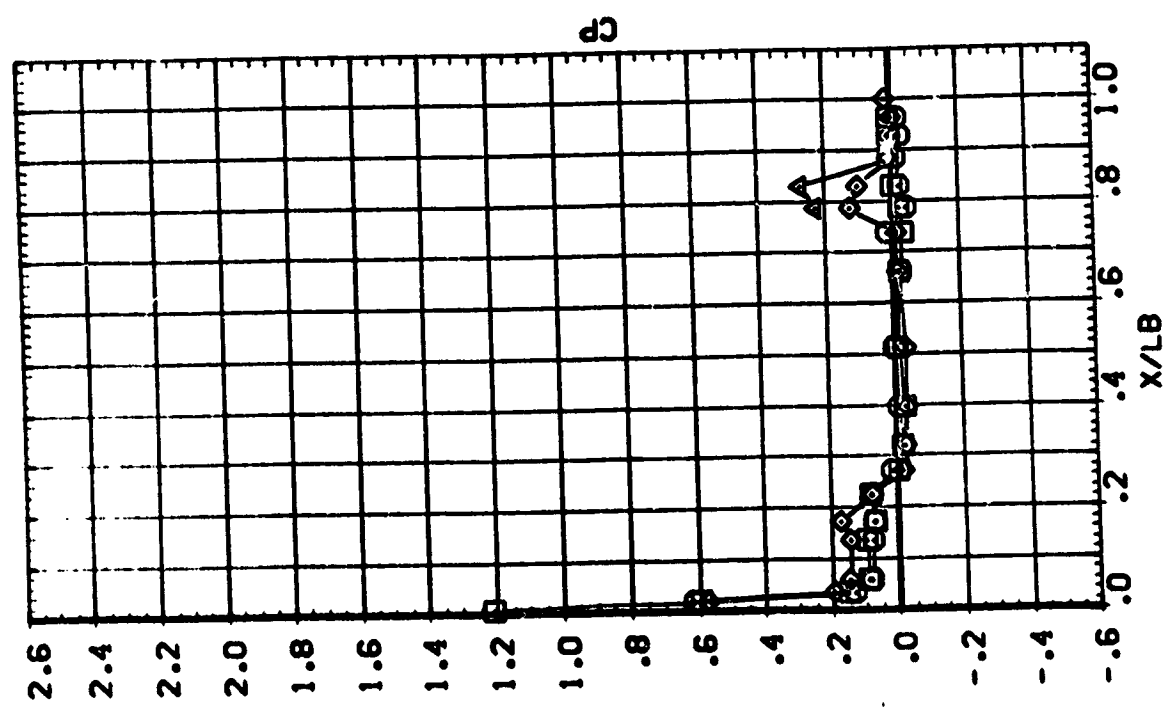
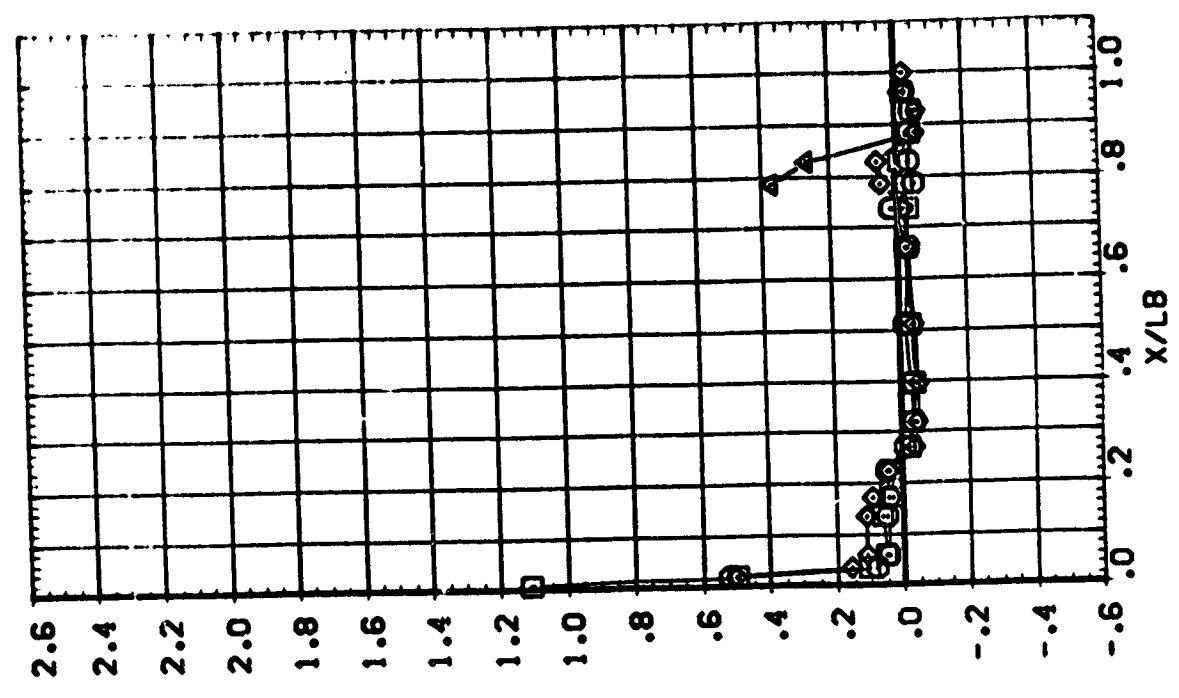
AVES 87-707 CA:2 02A

PARAMETRIC VALUES
 .000 R.DDER 70.000
 .000 R.DF.2 45.000

ALPHA
 ELEVON

MA: 70.000
 80.000
 120.000
 135.000

SYMBOL
 O
 D
 A



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES



AVES 87-707 0A12 (2A)

SYMBOL
OELI

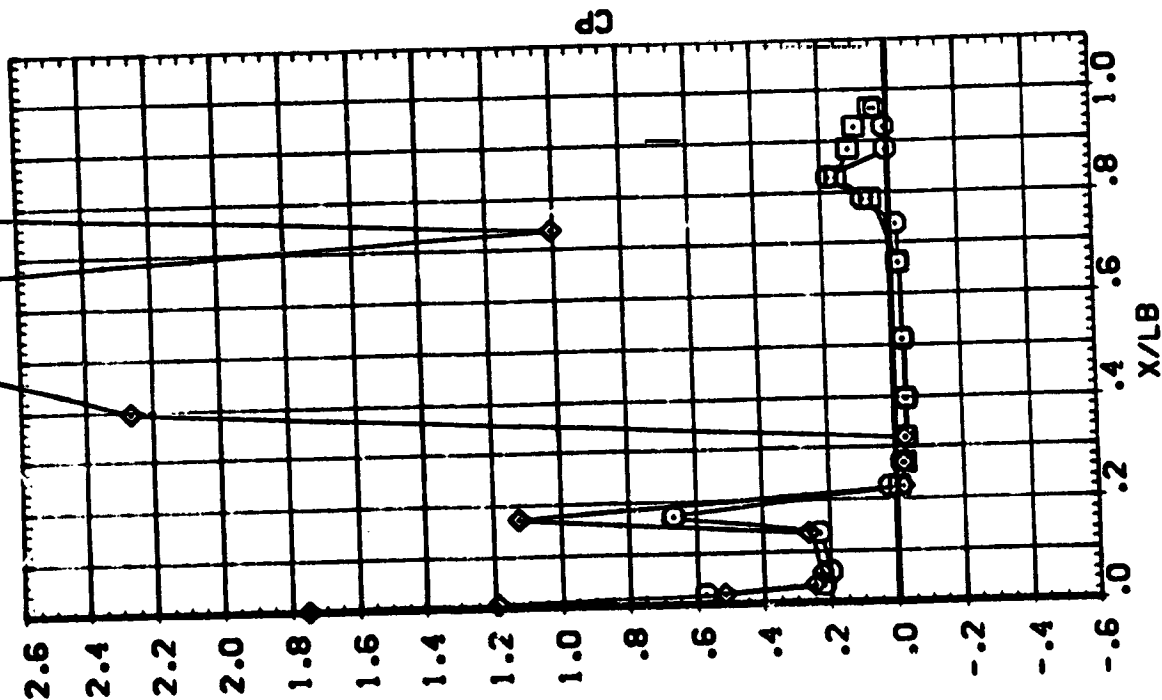
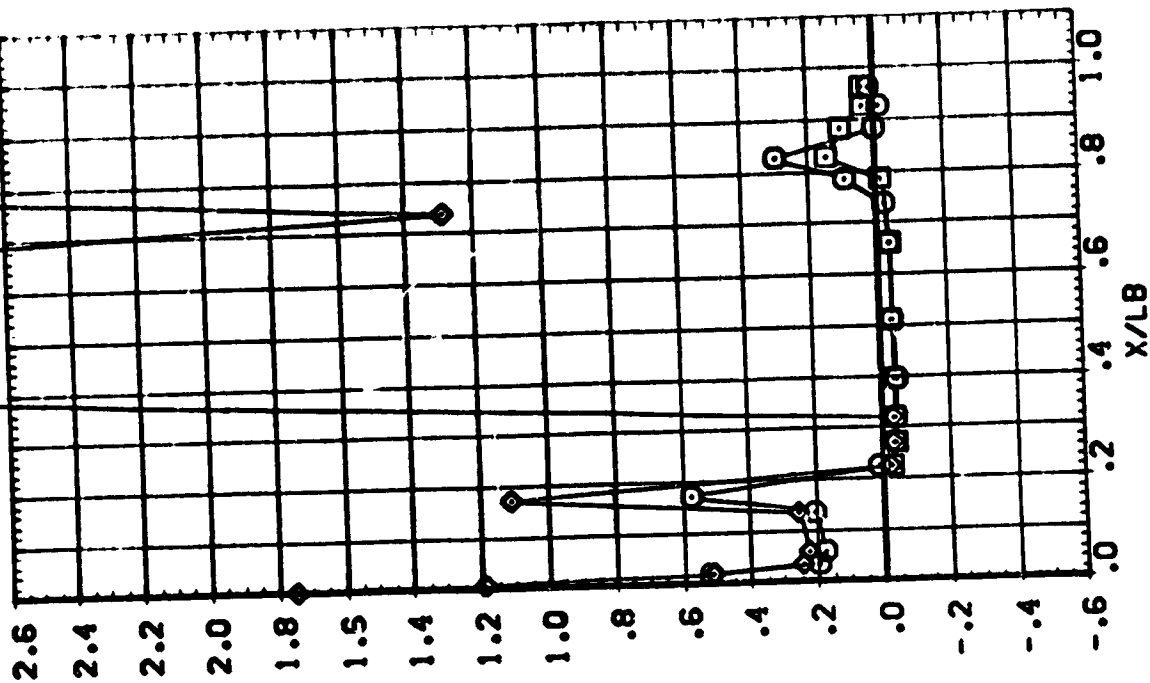
PHI
150.000
165.000
180.000

BETA
-1.60
3.180

MACH
3.501

ORBITER FUSELAGE (RBG803)

PARAMETRIC VALUES
ALPHA
ELEVON
-20.000
40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

CRBITER FUSELAGE (R80905)

AVES 87-707 CA:2 C2A

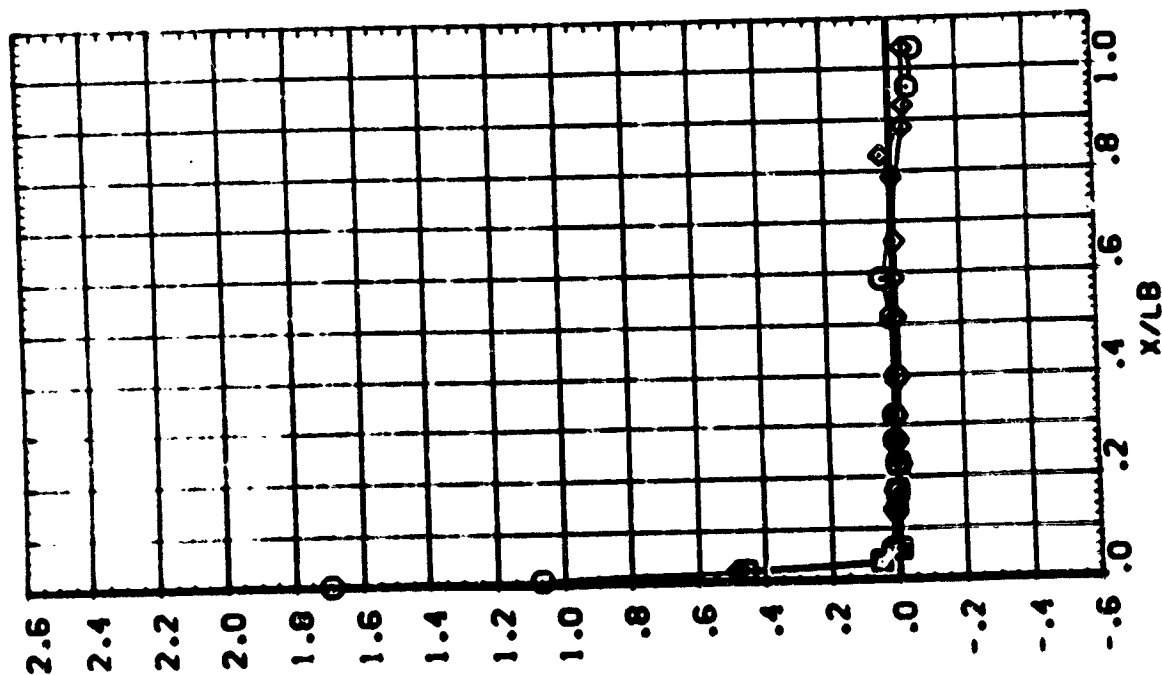
SYMBOL
 ○
 □
 ◇
 △

PL: .000
 70.000
 40.000
 55.000

BE: 6.50C
 WACH 3.50C

PARAMETRIC VALUES
 .000 R00ER 70.000
 .000 R00LR 40.000

ALPHA
 ELEVON



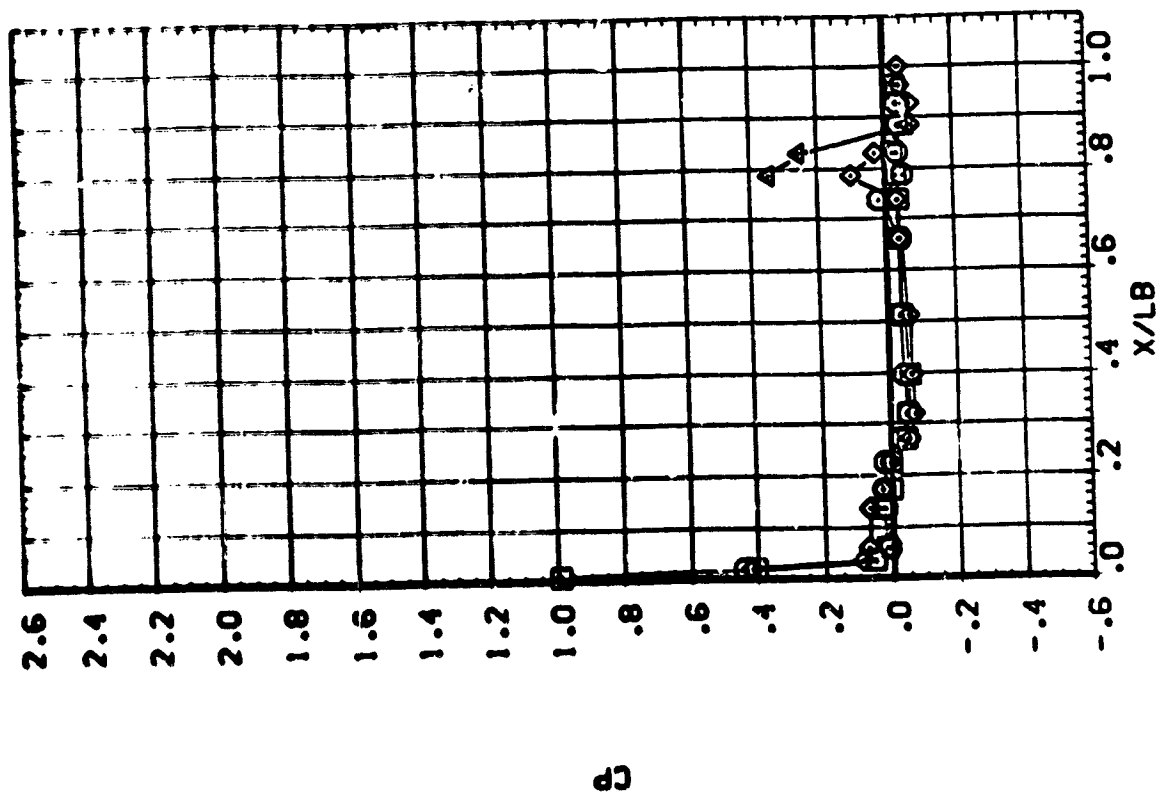
LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

EX-87-000000

1950 1951 1952 1953 1954

13

100-100000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

AVES 87-707 CA:2

SYMBOL
 □ □ □
 ◇

DEL
 150.000
 165.000
 180.000

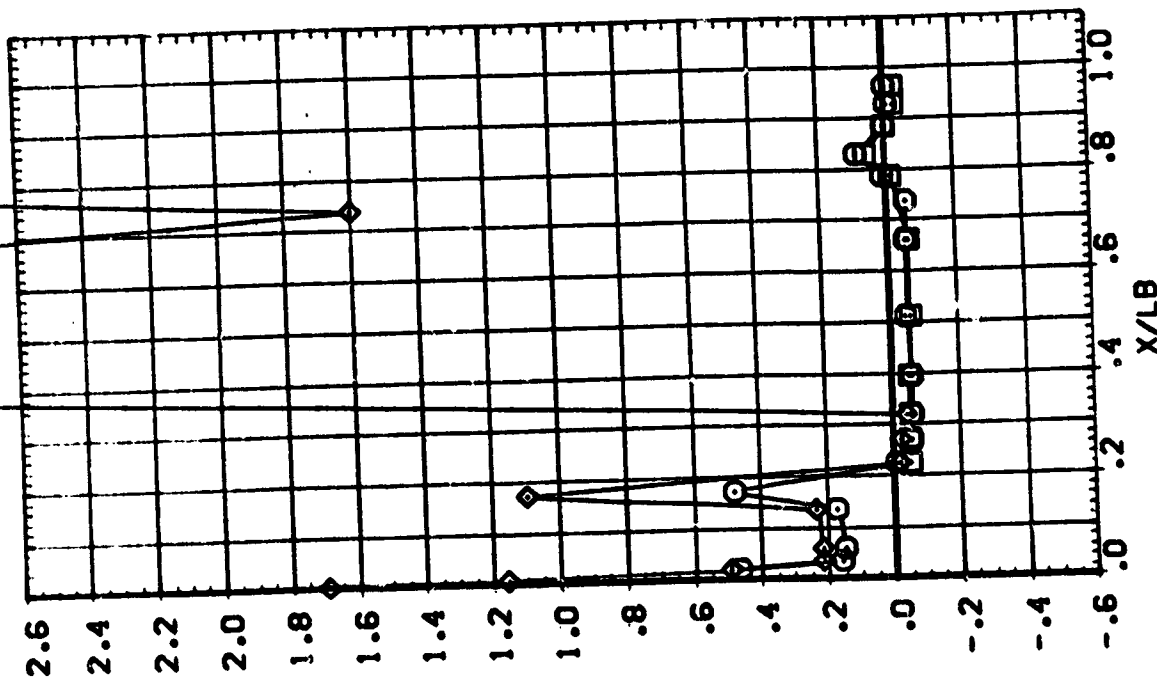
BETA
 5.530

MACH

3.501

ALPHA
 ELEVON

PARAME-TRIC VALUES
 .000 RUDDER
 .000 RUD-2
 -25.000
 45.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

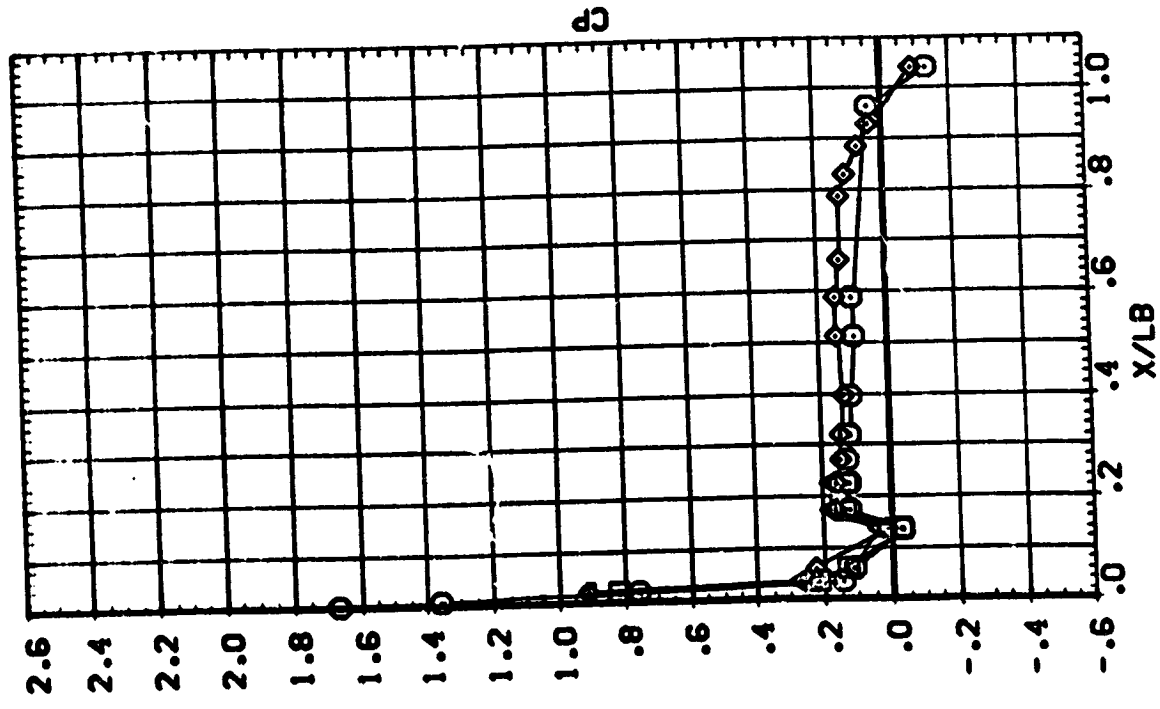
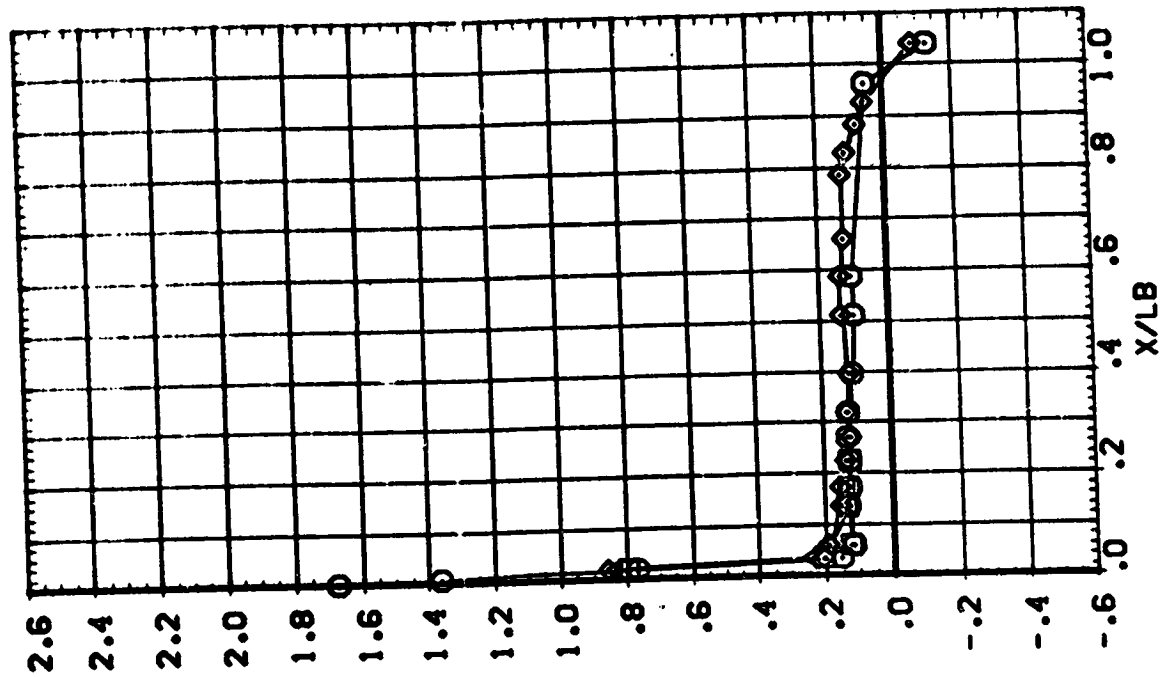
ORBITER FUSELAGE (RBCBC6)

AVES 87-707 CA12 C2A

PARAMETRIC VALUES
 :0.000 :RUDER :20.000
 :0.000 :RUFLR :40.000

ALPHA
 ELEVON

SYMBOL
 () O Δ



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

AVES 8/2/71 J. GRILL GEN

SYMBOL
 O
 □
 ◇
 △

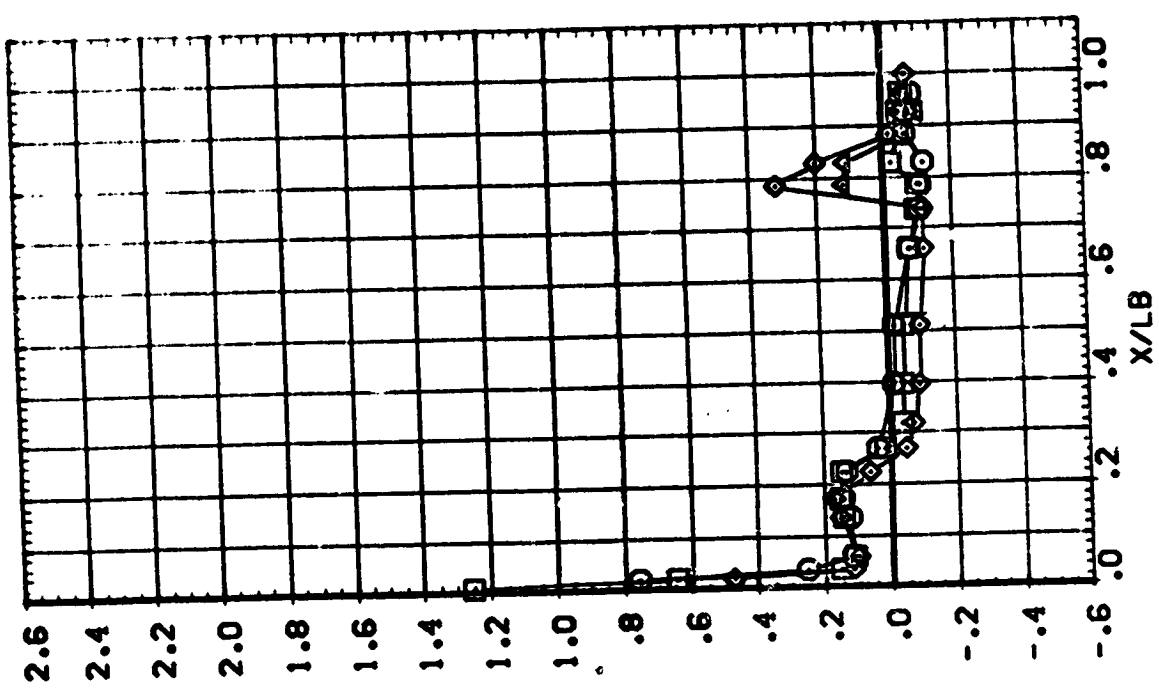
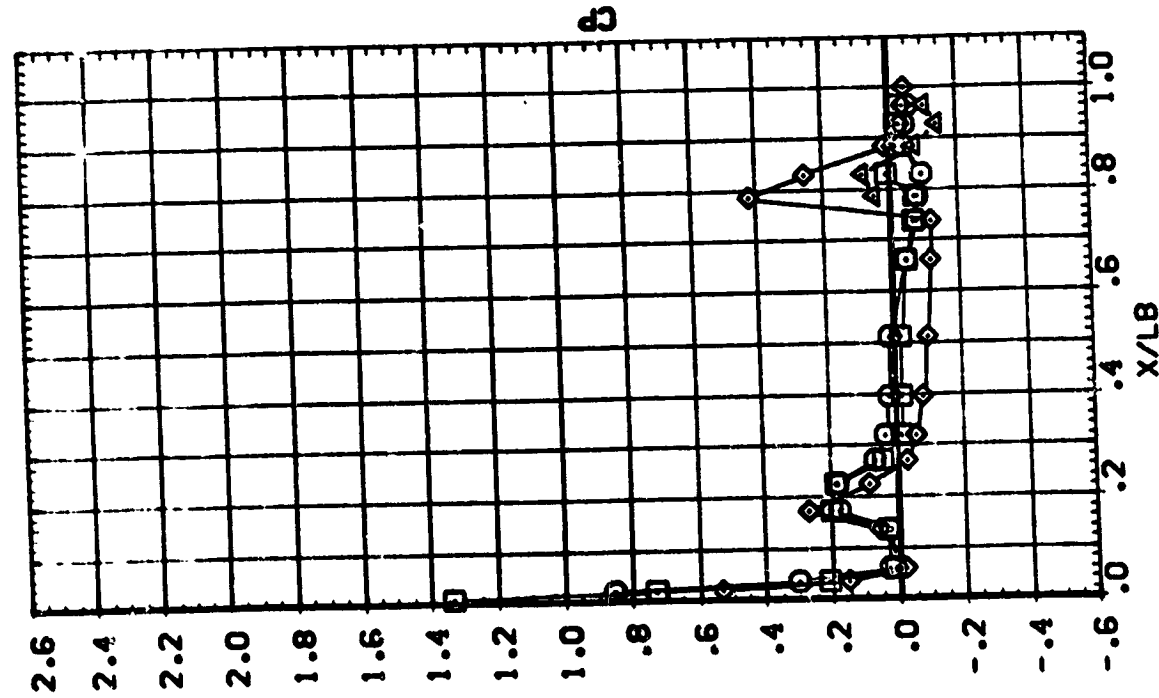
PM: 75.000
 90.000
 120.000
 135.000

BE TA -6.520
 -3.340

MACH 2.498

ALPHA
 ELEVON

PARAMETRIC VALUES
 10.000 2.000 20.000
 .000 .000 40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBG806)

AVES 87-707 GA:2 02A

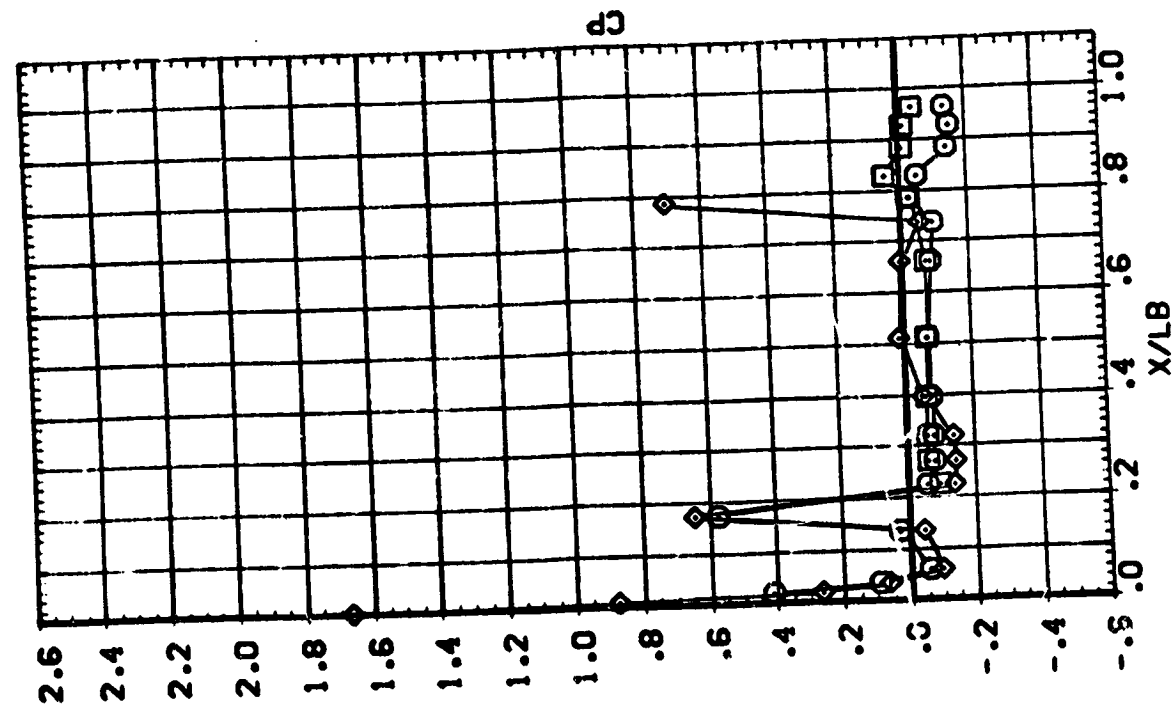
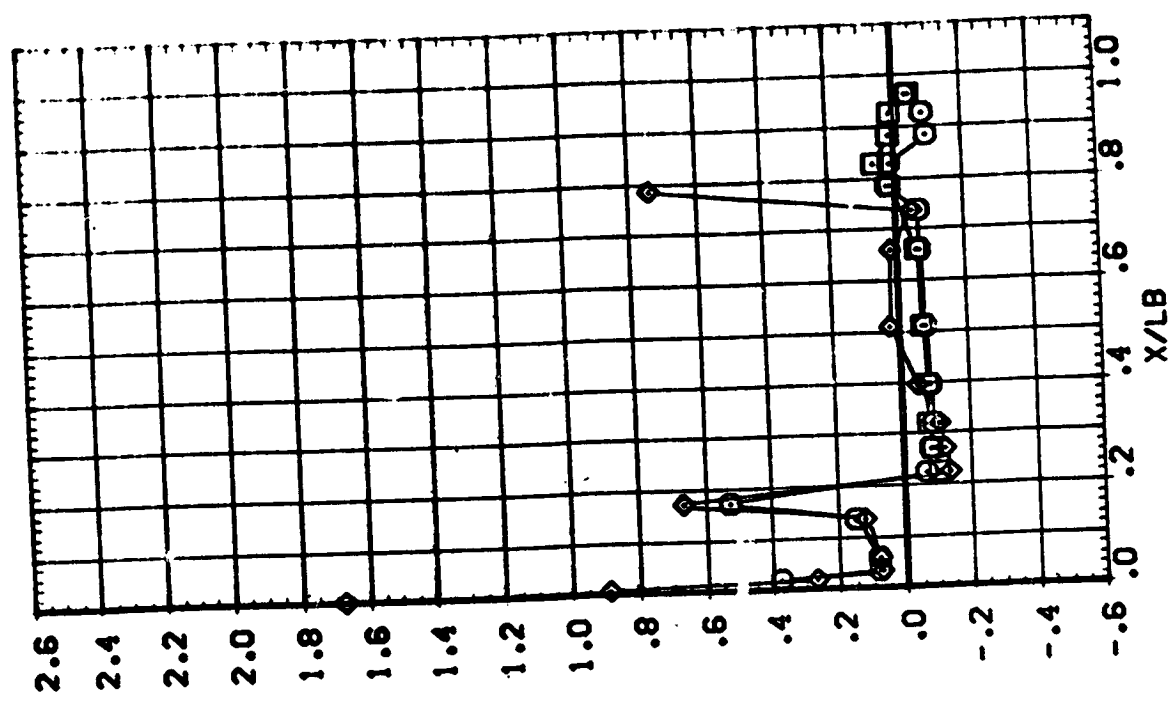
SYMBOL
 O
 I
 D

PM-I
 150.000
 165.000
 180.000

BE-A
 -6.520
 -3.340

MACH
 2.456

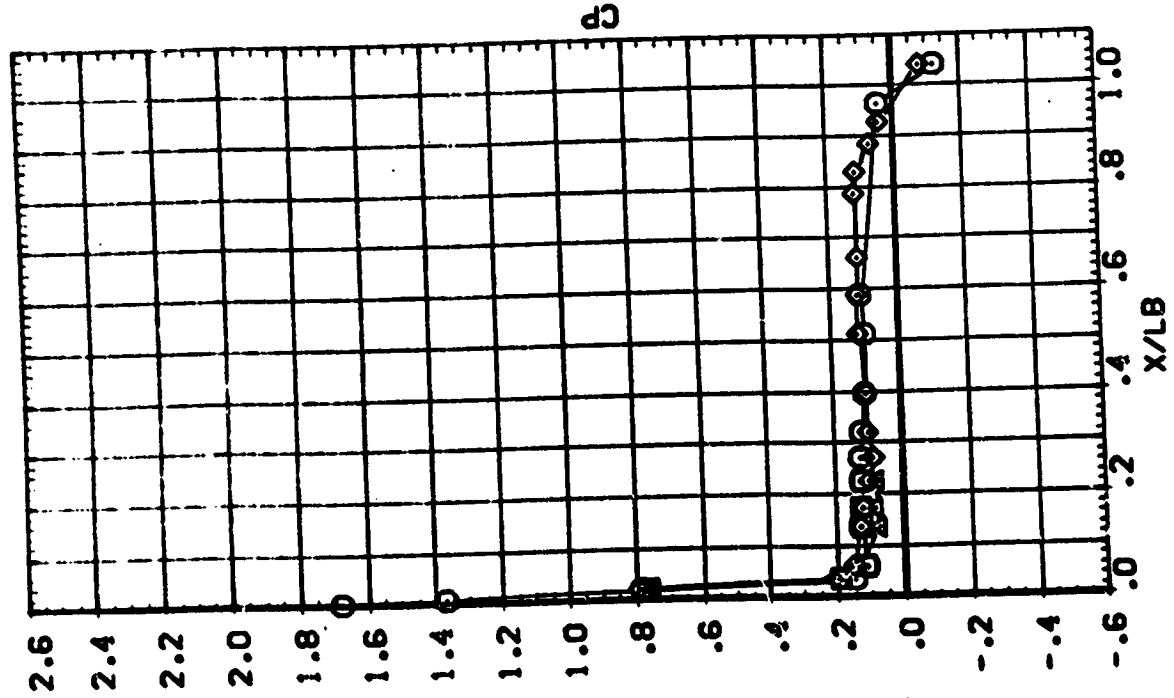
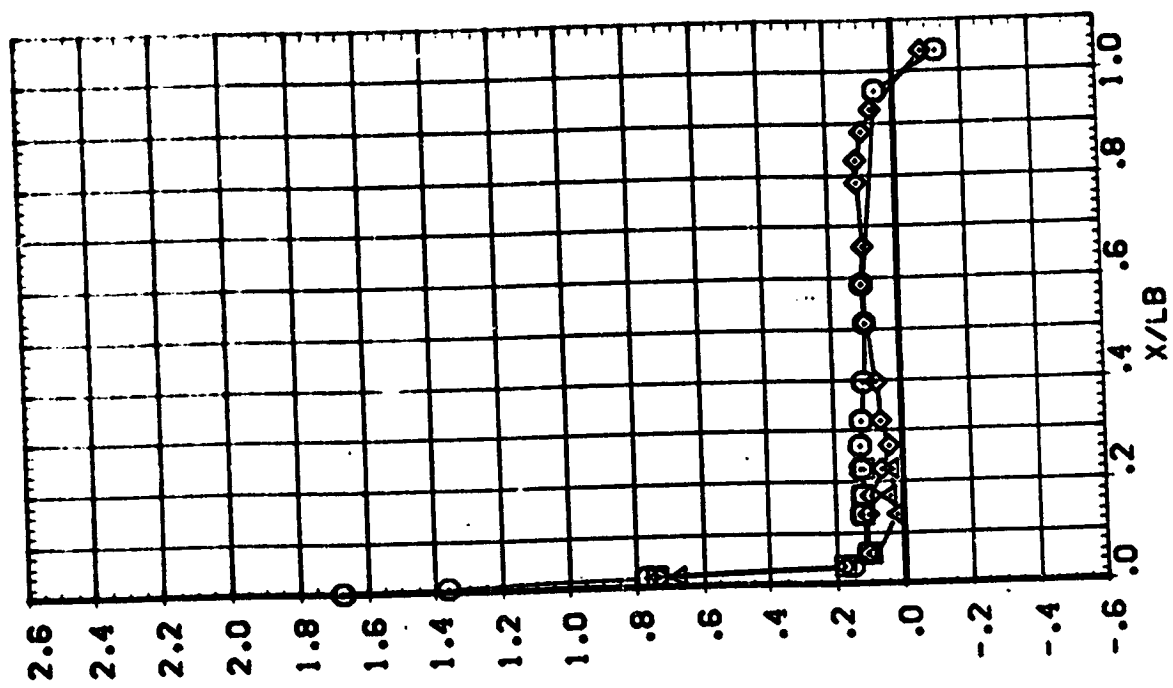
PARAMETRIC VALUES
 ALPHA 10.000
 ELEVON .000
 RUDDER -20.000
 RUDLER 40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

PARAMETRIC VALUES
 ALPHA: 0.000 0.000 0.000
 ELEV: 20.000 40.000 40.000

MA: 0.000 20.000 40.000 55.000
 BETA: -0.60 3.320
 MACH: 2.498



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (R80806)

AVES 87-707 CA12 02A

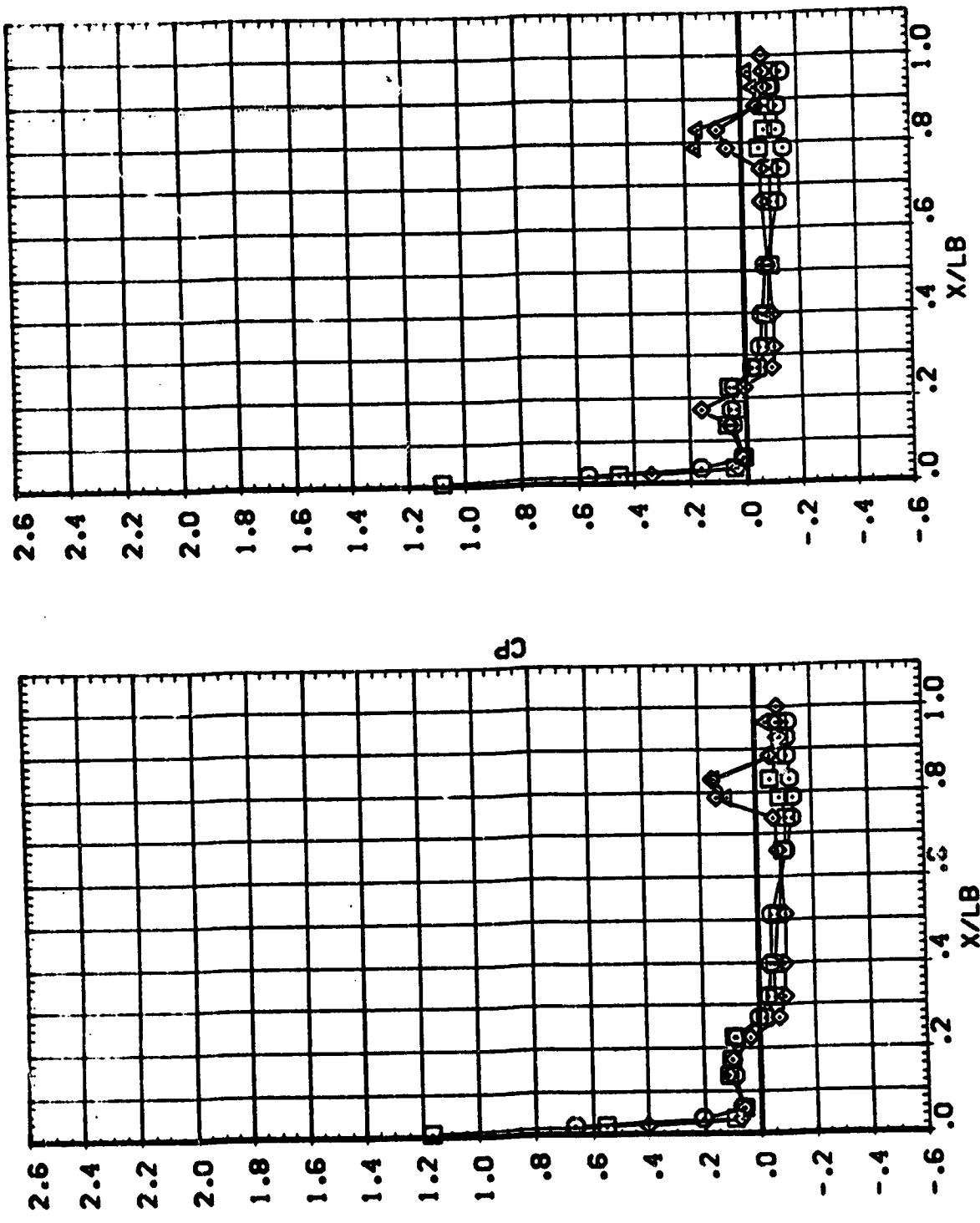
SYMBOL
 ○
 □
 ◇
 △

PHI 70.000
 90.000
 170.000
 135.000

BETA -1.160
 3.070

MACH 2.498

PARAMETRIC VALUES
 ALPHA 10.000
 ELEVON .000
 RUDDER -20.000
 RUFLR 40.000



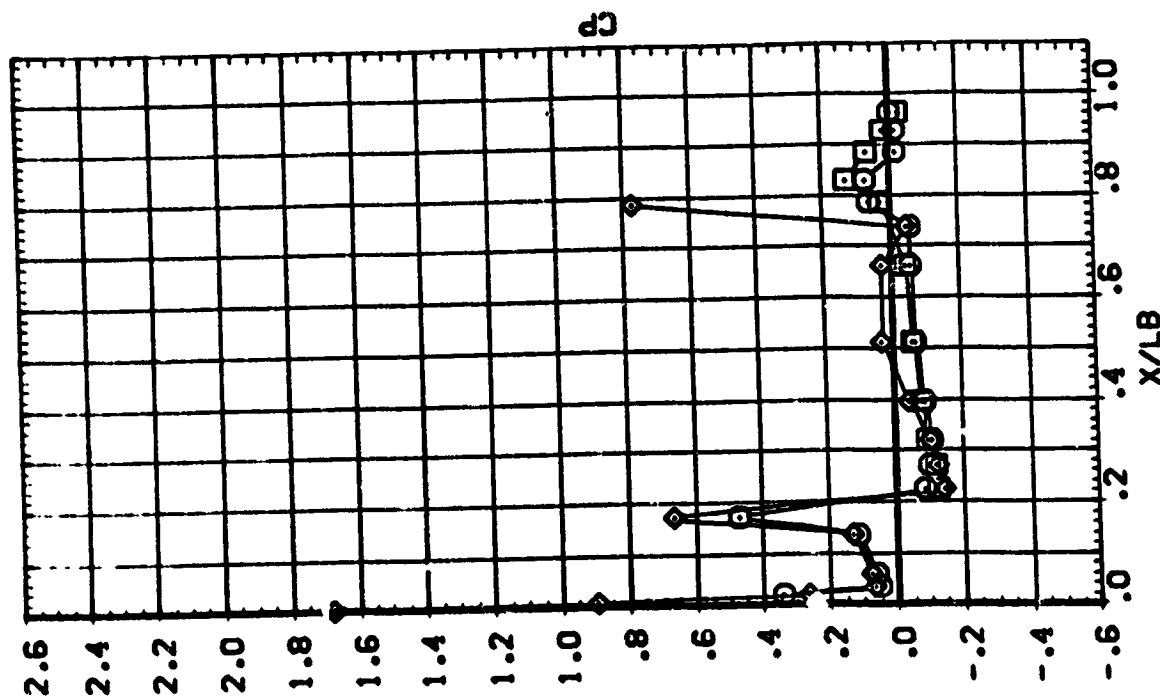
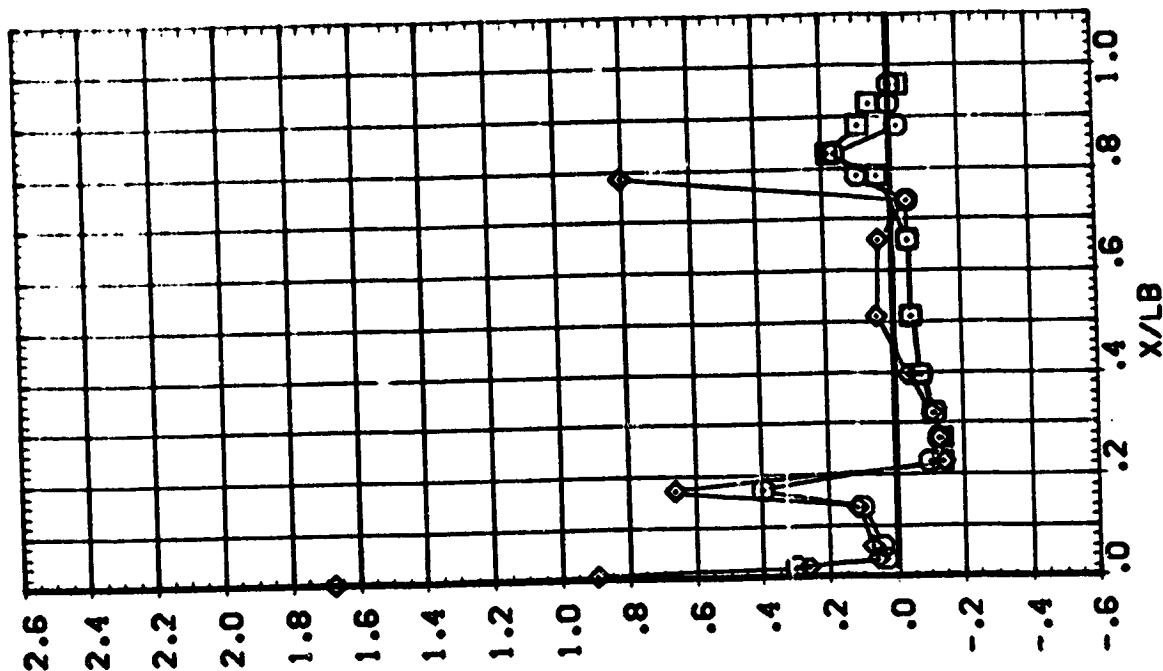
LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

PARAMETRIC VALUES
 10.000 RLODR 20.000
 .000 RLOLR 40.000

ALPHA
 ELEVON

BE'A 2.498
 .160

PM: 50.000
 65.000
 80.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

III

AVES 87-707 3A12 02A

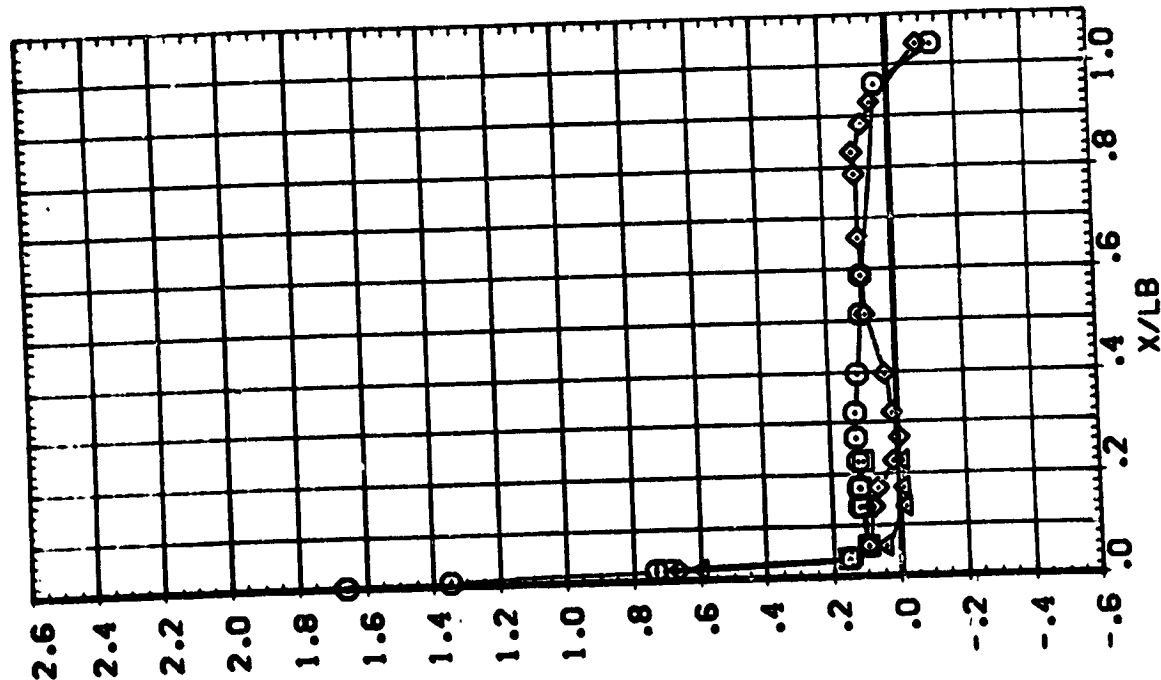
ORBITER FUSELAGE (R80806)

SYMBOL
 O 10.000
 X 20.000
 Δ 40.000
 55.000

RETA 6.210 MACH 2.498

PARAMETRIC VALUES
 10.000 RUDER 20.000
 .000 20.000 40.000

ALPHA
 ELEVON



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RB0806)

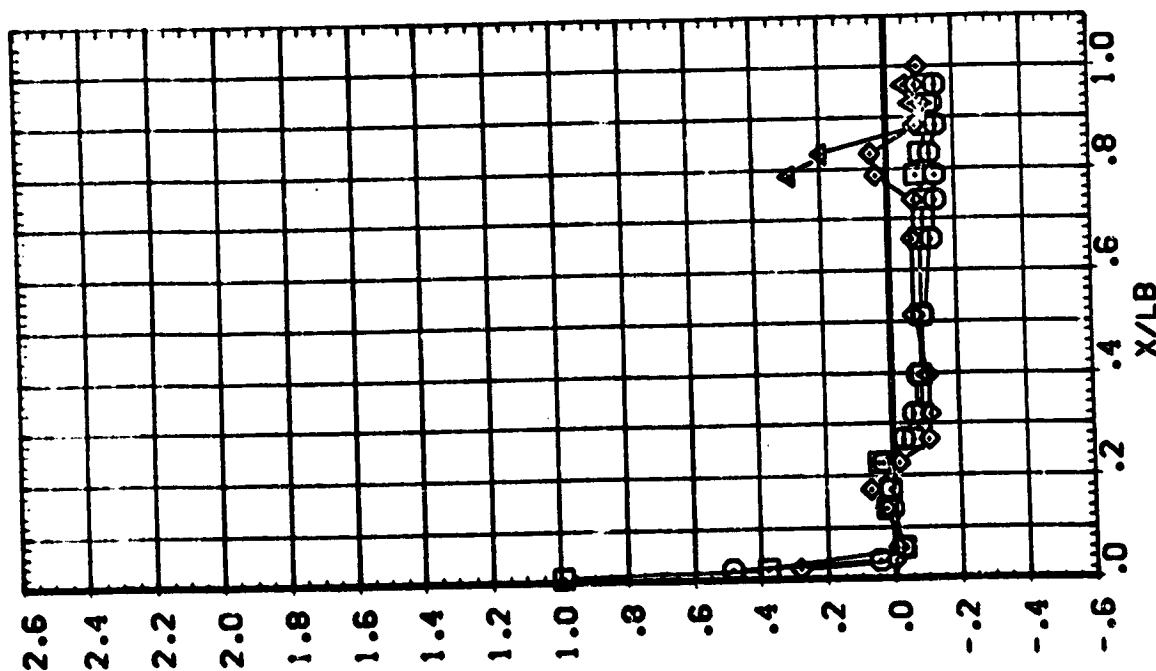
AVES 87-707 CA12 02A

SYMBOL
○
◇
△

PM: 70.000
90.000
170.000
135.000

BE'A 6.210
MACH 2.498

PARAMETRIC VALUES
ALPHA 10.000
ELEVON .000
RUDDER 30.000
RUDLR 40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

III

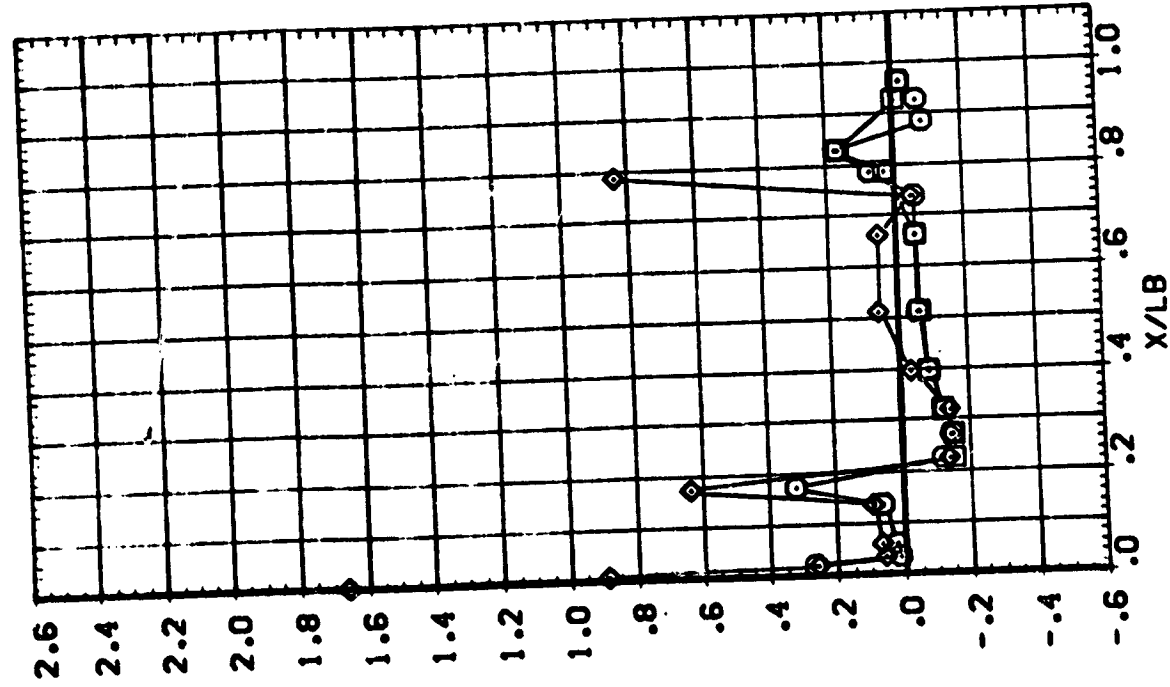
ORBITER FUSELAGE (RBQB06)

AVES 87-707 3A12 C2A

SYMBOL
 150.000
 165.000
 180.000

BE'A 6.21C MACH 2.498

PARAMETRIC VALUES
 10.000 RUDER 20.000
 .000 ELEVON 40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

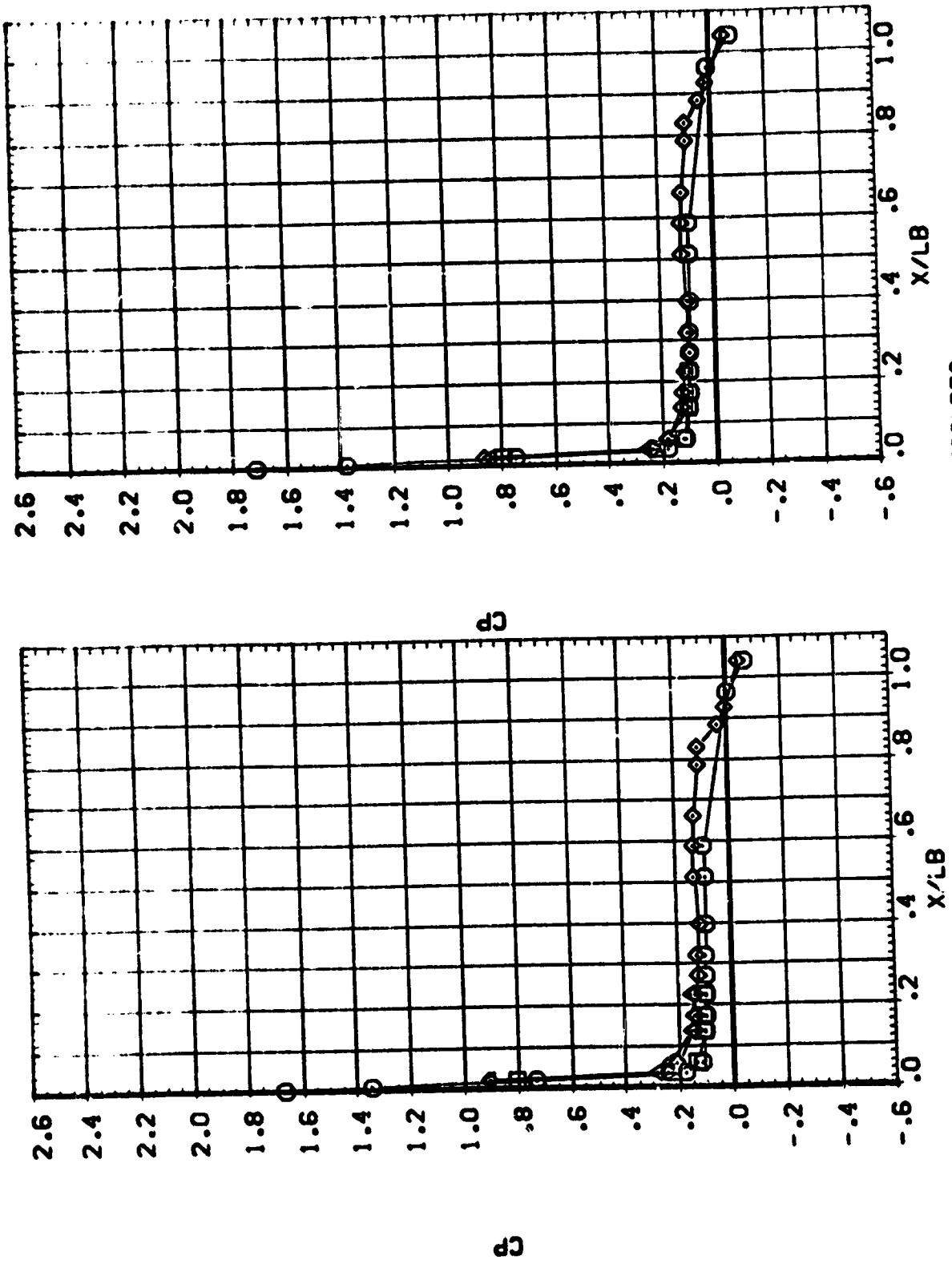
ORBITER FUSELAGE (RB0306)

AVES 87-707 CA:2 C2A

SYBC
 O
 □
 ◇
 △

BE'A MACH
 .000 3.501
 20.000 -6.750
 40.000 -3.450
 55.000

PARAMETRIC VALUES
 ALPHA 10.000 RJOFF 20.000
 ELEVON .000 RJOFLR 40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

III

AVES 87-707 3A:2 32A

SYMBOL
○
◇
△

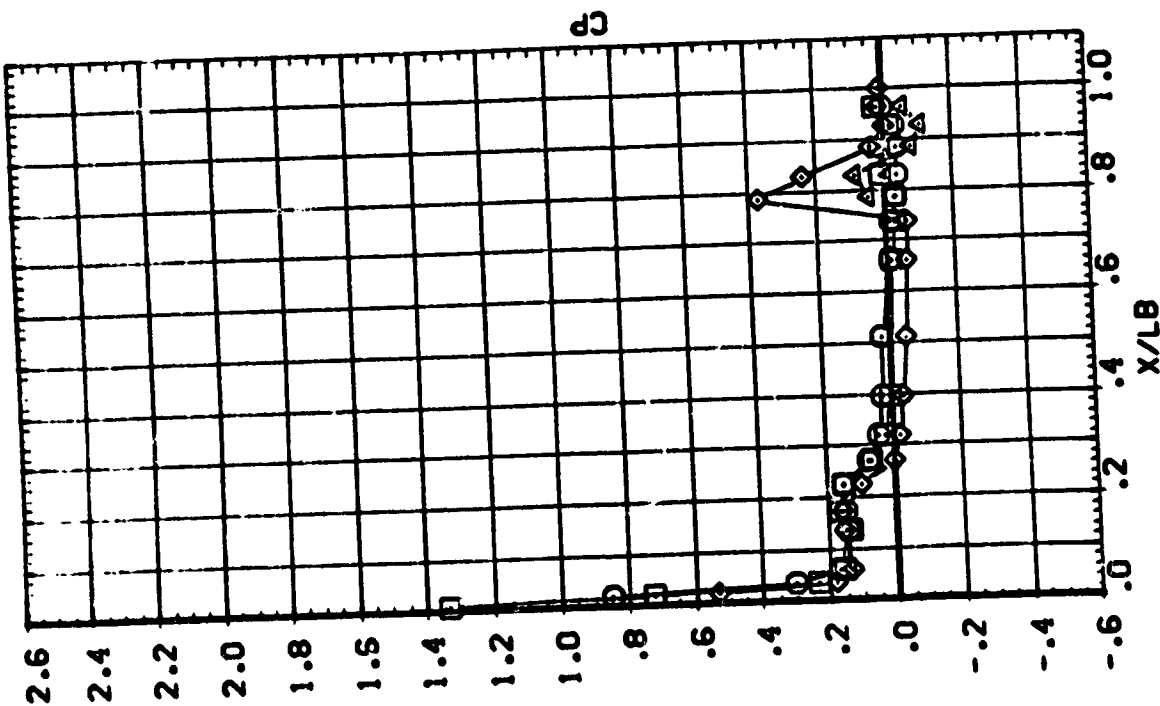
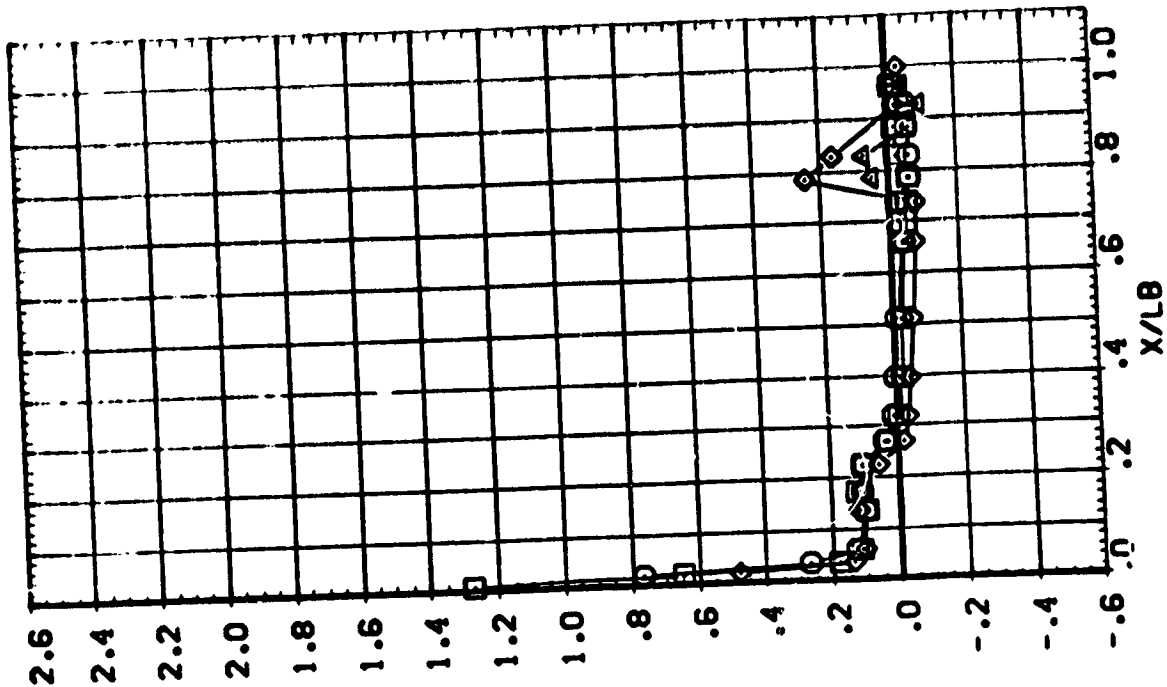
PHI
70.000
90.000
120.000
150.000

BETA
-6.750
-3.450

MACH
3.501

ORBITER FUSELAGE (R8C3C6)

PARAMETRIC VALUES
ALPHA
ELEVON
10.000
.000
R/D L R
-75.000
40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (R8G3C6)

AVES 87 707 2A:2 C2A

5-100

100.000
150.000
160.000
180.000

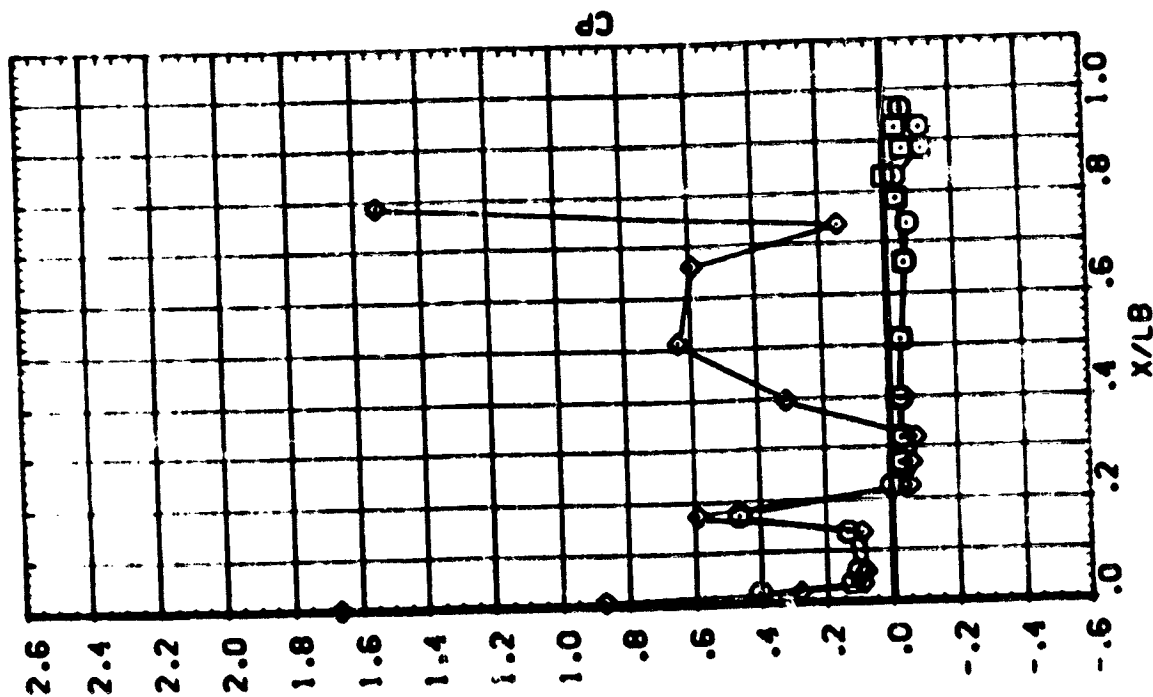
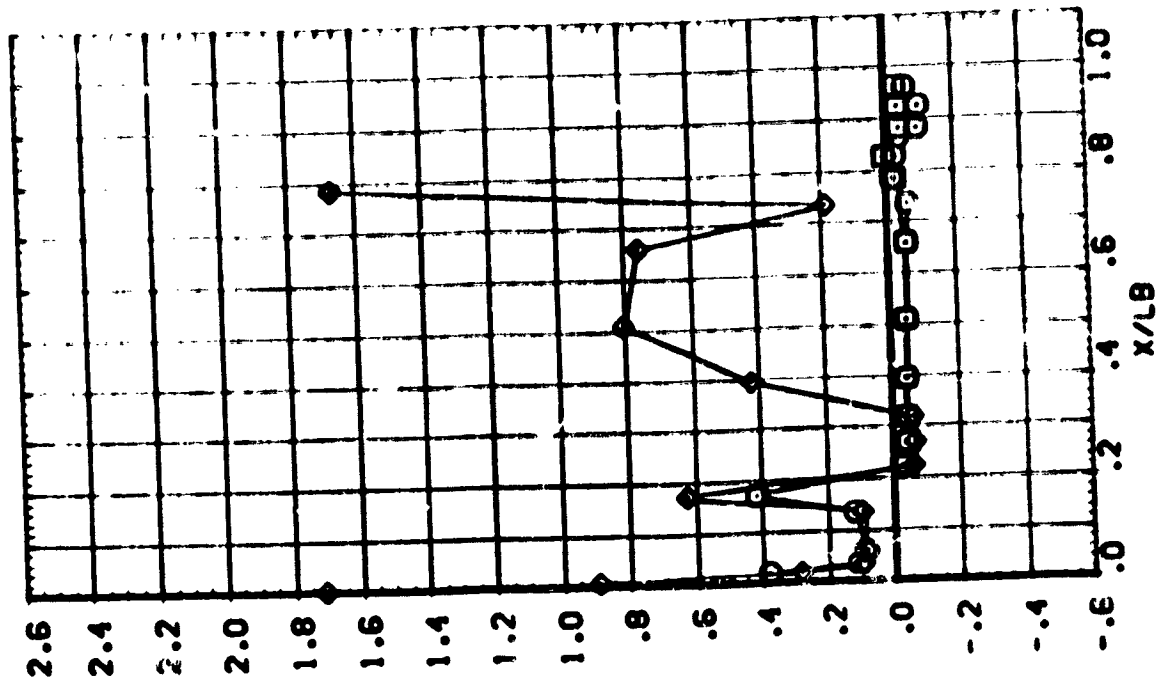
8.750
-3.450

WAS- 3.501

PARAM: 2:0 1A:15

ALPHA
ELEVON

10.000
20.000
30.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

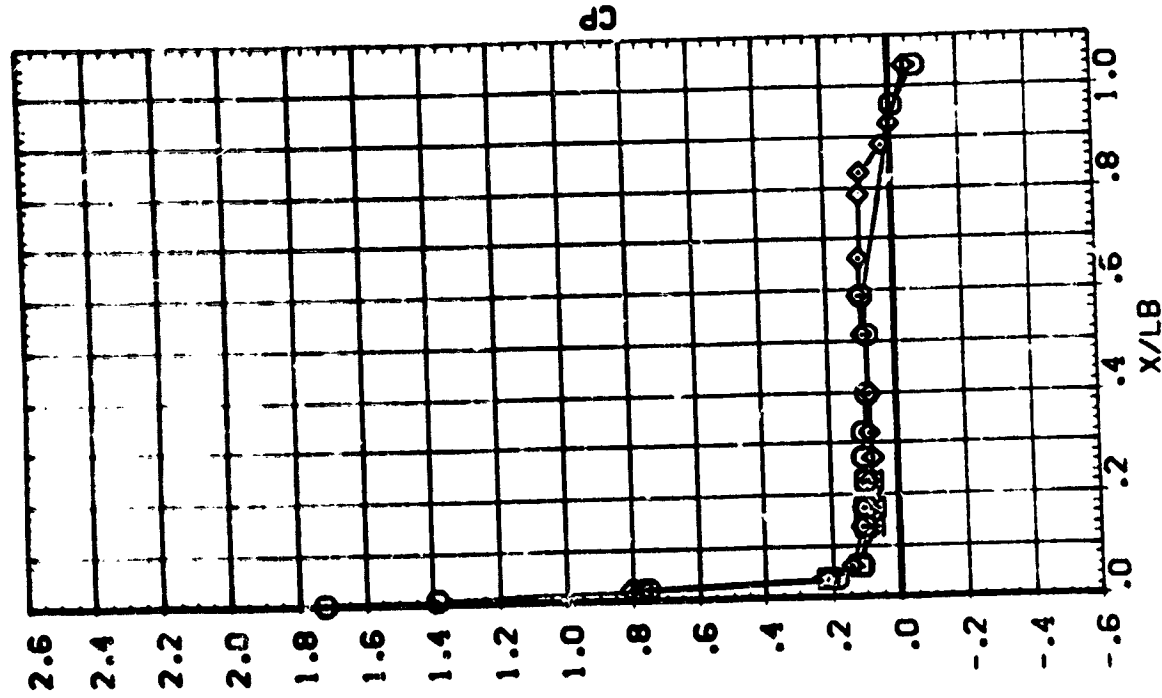
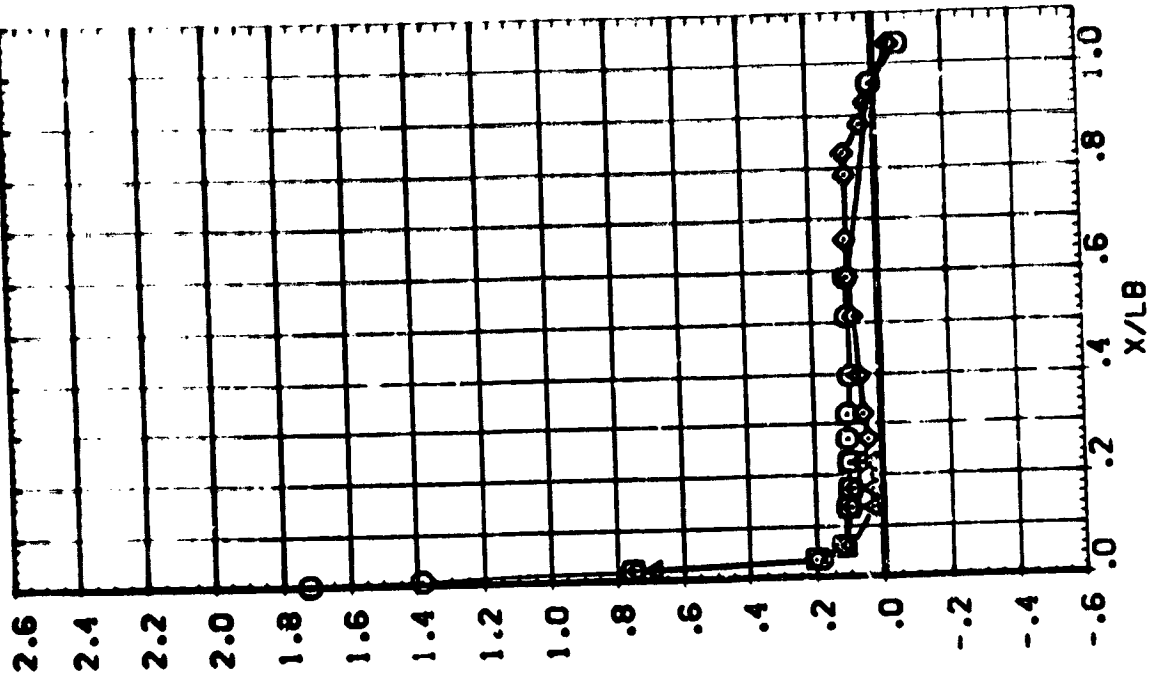
ORBITER : JSELAJE : 230306:

37A

AVES 87 707 3A:2

ALPHA 6.170 10.000 20.000 30.000 40.000

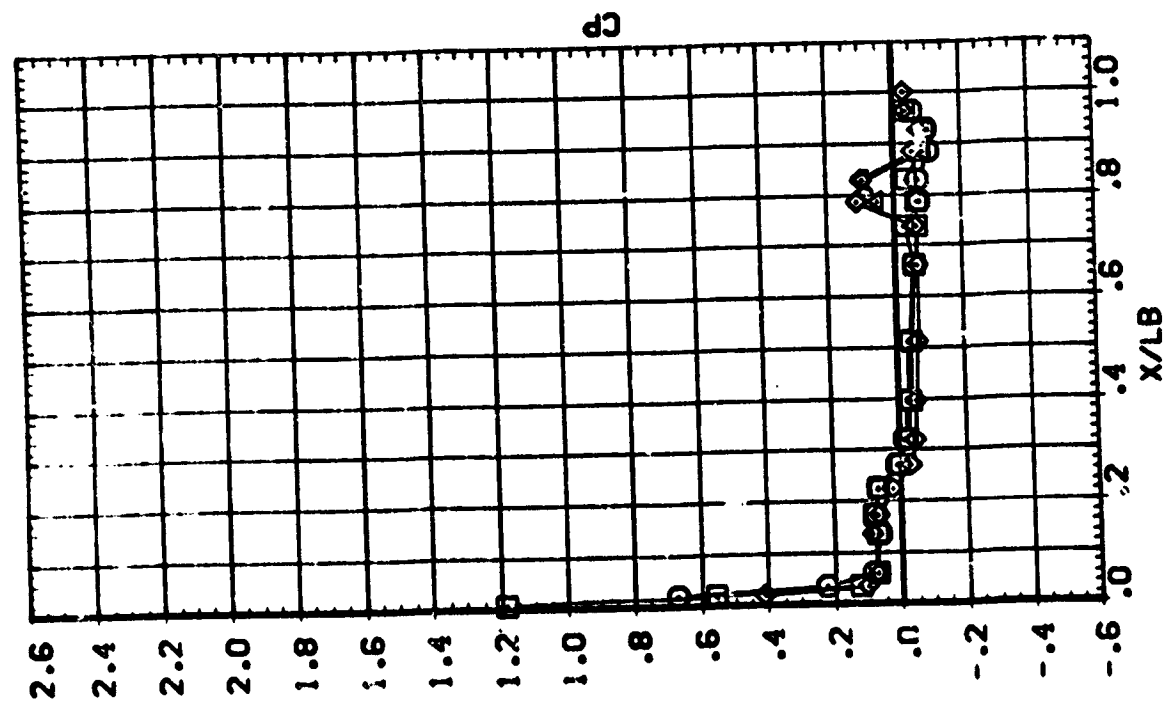
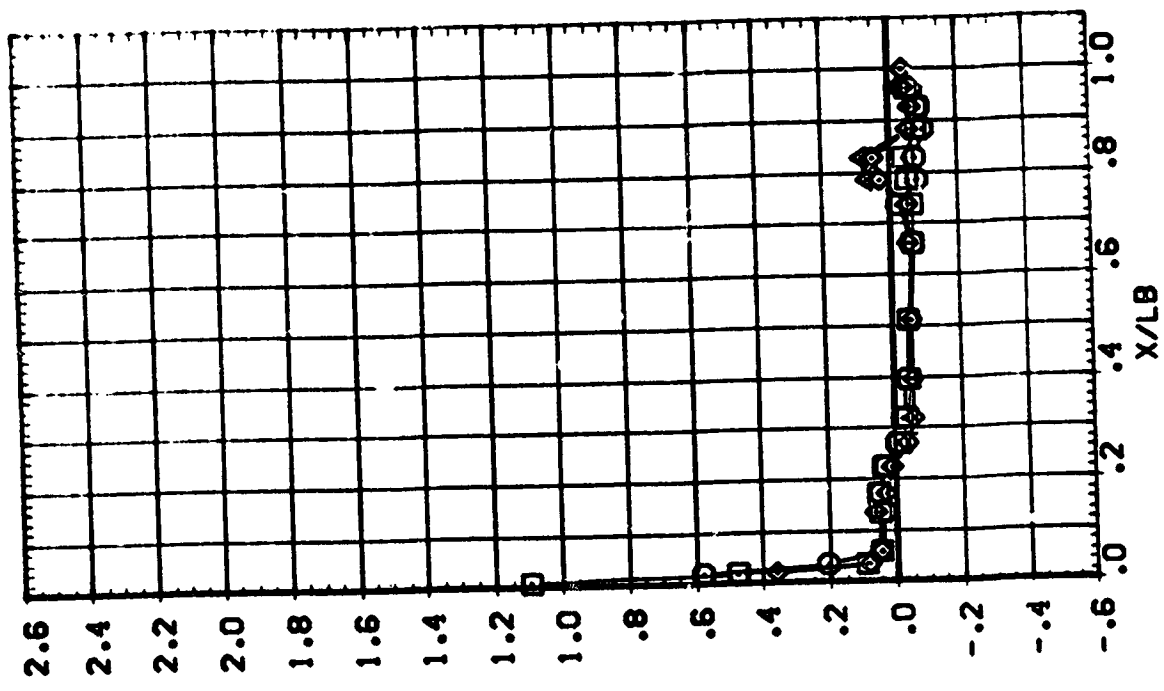
3.45 3.501



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

PARAMETRIC VALUES
ALPHA ELEVON
10.000 .000
RLODER RLOFLR
-20.000 40.000

SYMBOL
□
◇
△
PAC: 3.50:
BETA 3.140
-1.160
70.000
90.000
10.000
35.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

WIND TUNNEL TEST

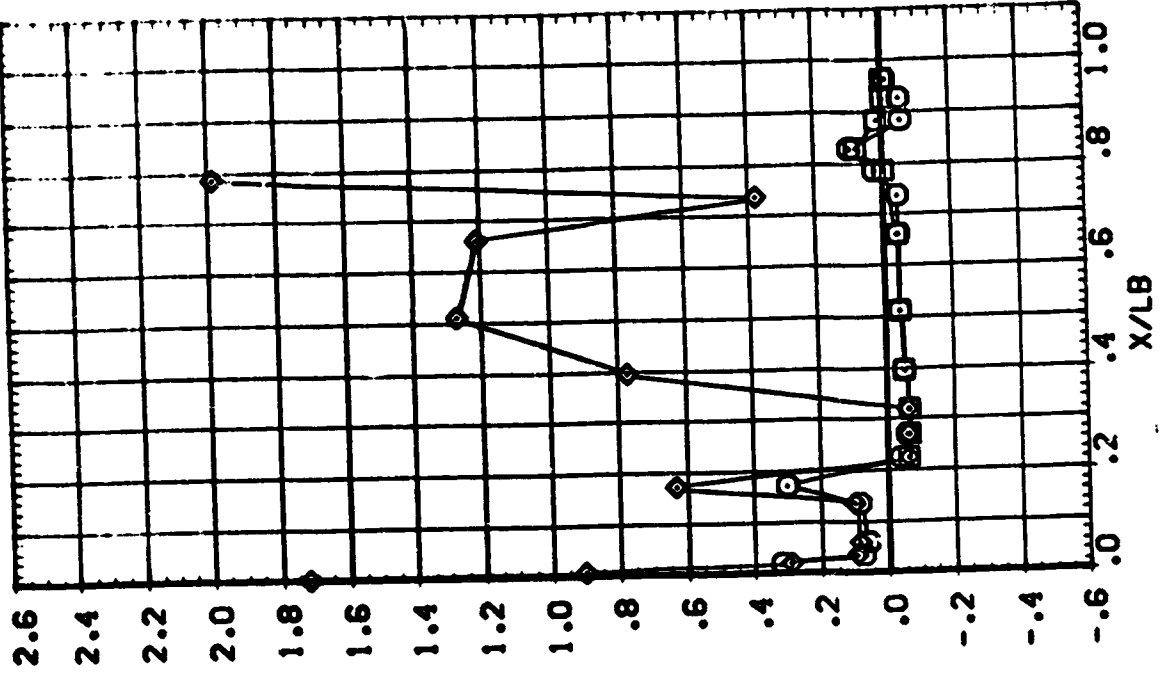
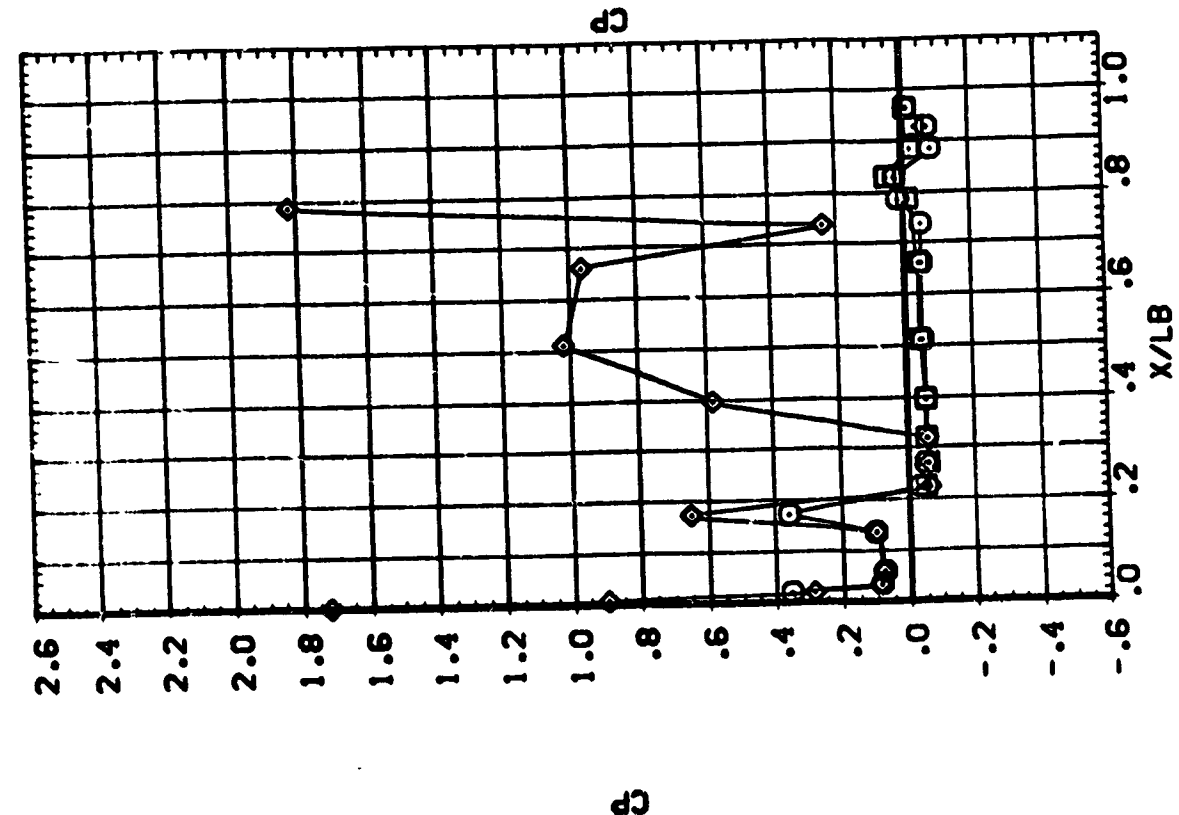
SYMBOL
 ○
 □
 ◇

REYNOLDS
 1.5E+06
 1.6E+06
 1.8E+06

BETA
 0.00
 0.00
 0.00

MACH
 3.50
 3.50
 3.50

PARAMETRIC VALUES
 ALPHA 10.000
 ELEVON 0.000
 RUDER 20.000
 10.000



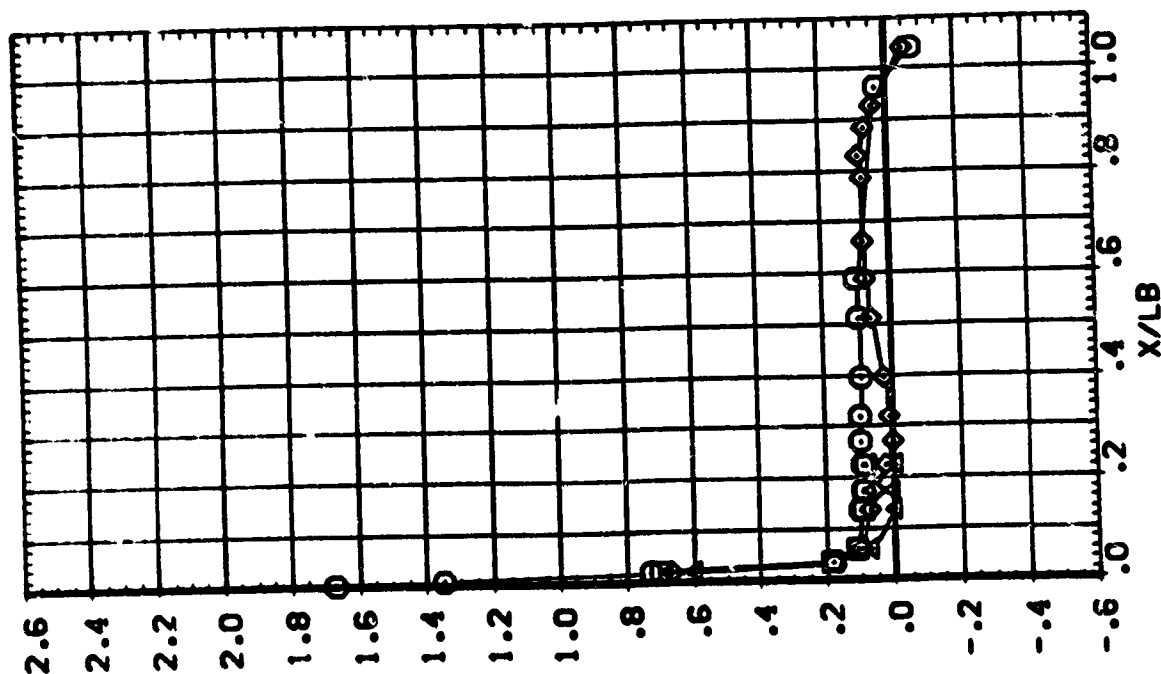
LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

AMES 87-707 CA12 C2A

SYMBOL
 ○ □ ◇ △

Re: .000 20.000 40.000 55.000
 BE'A 6.440 MACH 3.501

PARAMETRIC VALUES
 ALPHA 10.000 RUDER .000 RUDFLR 45.000
 ELEVON 20.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

SYMBOL
 ○ □ ◇ △

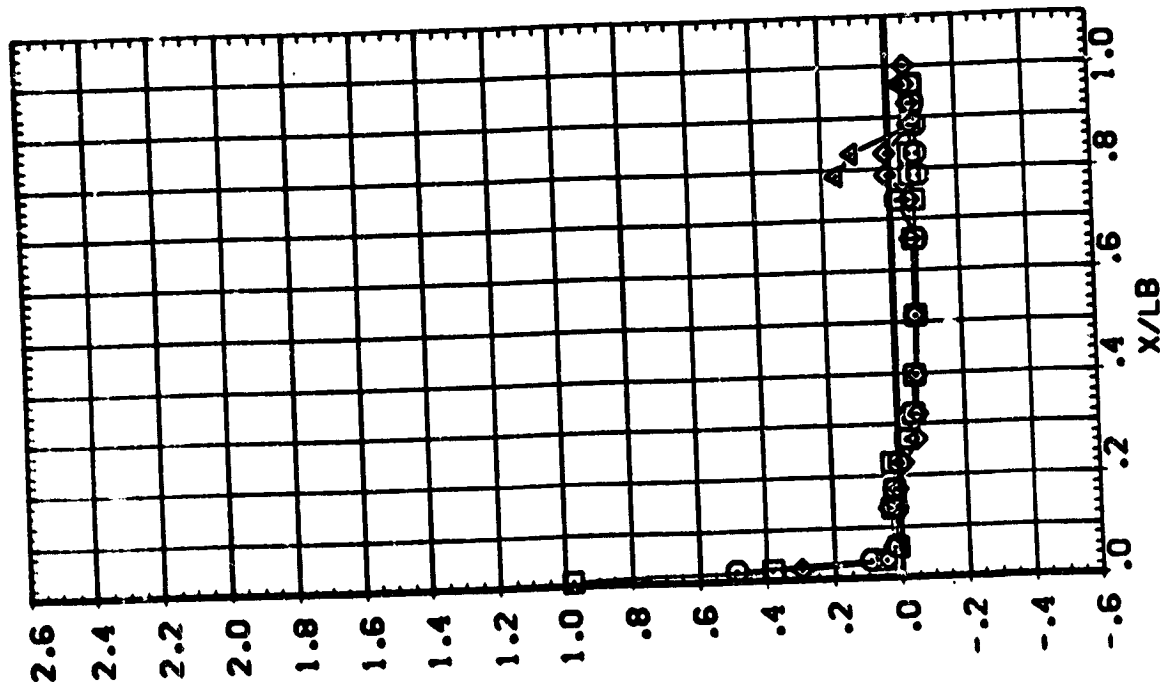
PMI
 70.000
 90.000
 170.000
 135.000

BETA
 6.440

MACH
 3.501

ALPHA
 ELEVON

PARAMETRIC VALUES
 10.000 RJOER
 .000 RJOER
 20.000
 40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

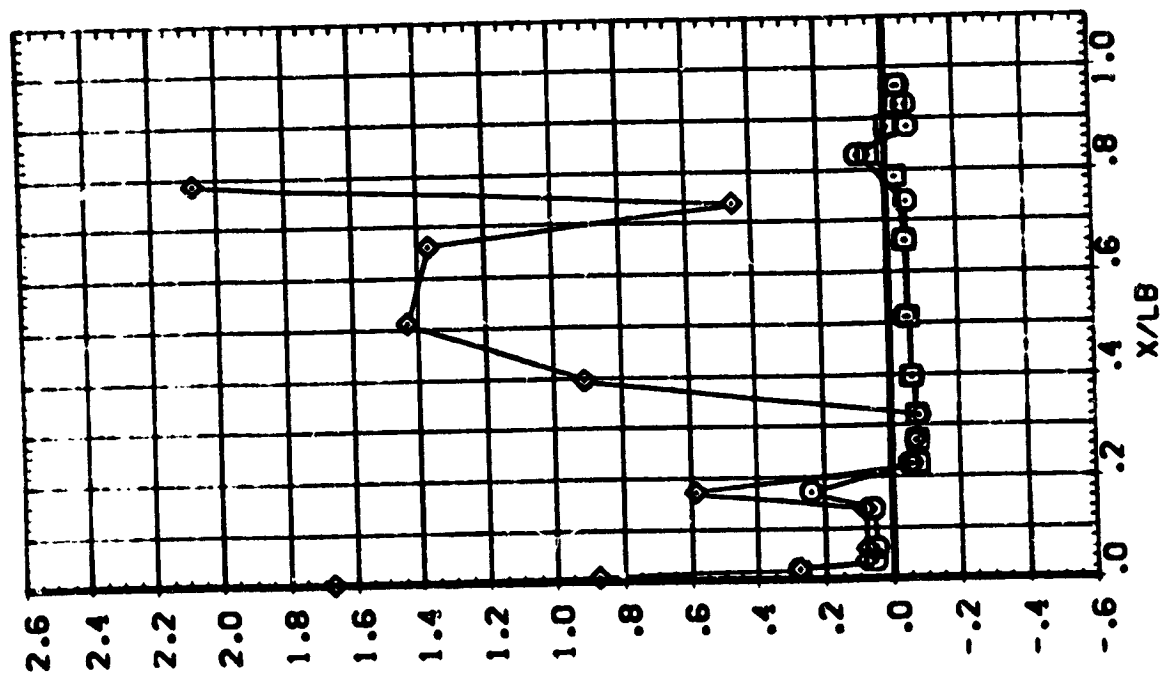
ORBITER FUSELAGE (R80306)

AVES 87 707 0A12 32A

SYNCH
:50.000
:65.000
:80.000

BE'A 6.440 WACH 3.50:

PARAMETRIC VALUES
ALPHA 0.000 RJOER 70.000
ELEVON .000 RJO'R 40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (R80807)

AVES 87-707 0A12 02A

SYMBOL
 P-1
 20.000
 40.000
 55.000

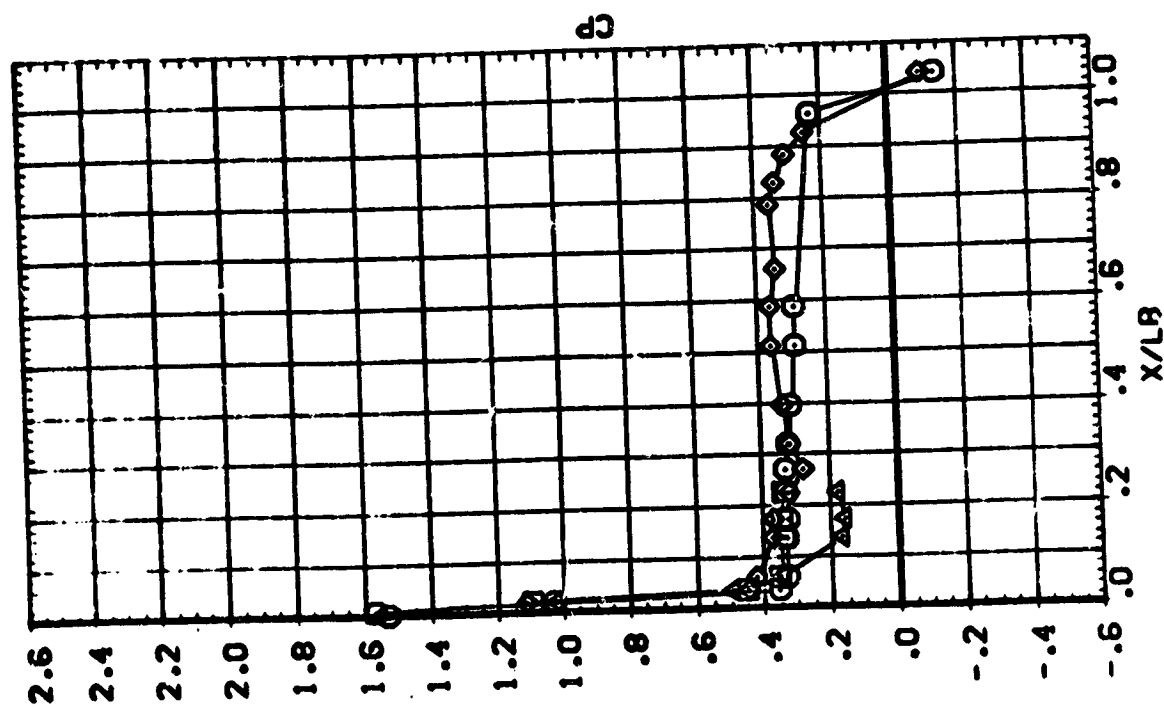
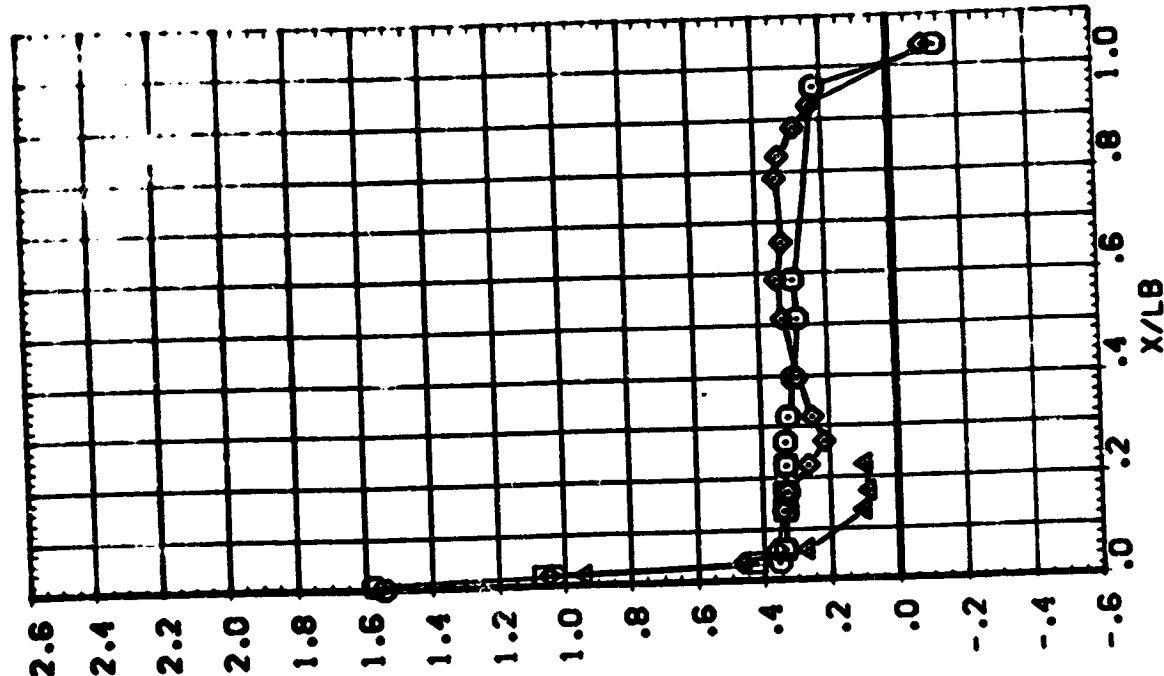
BETA
 6.480
 3.370

MAC

2.450

PARAMETRIC VALUES
 20.000 20.000 20.000
 40.000 40.000 40.000
 55.000 55.000 55.000

ALPHA
 ELEVON



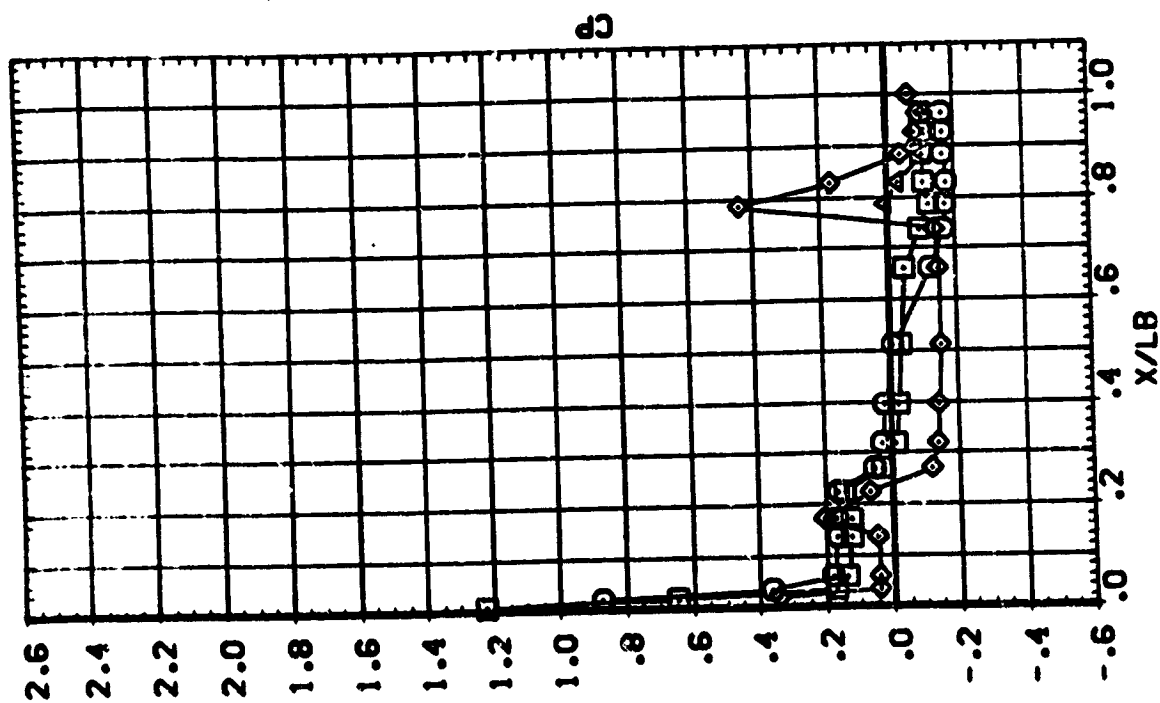
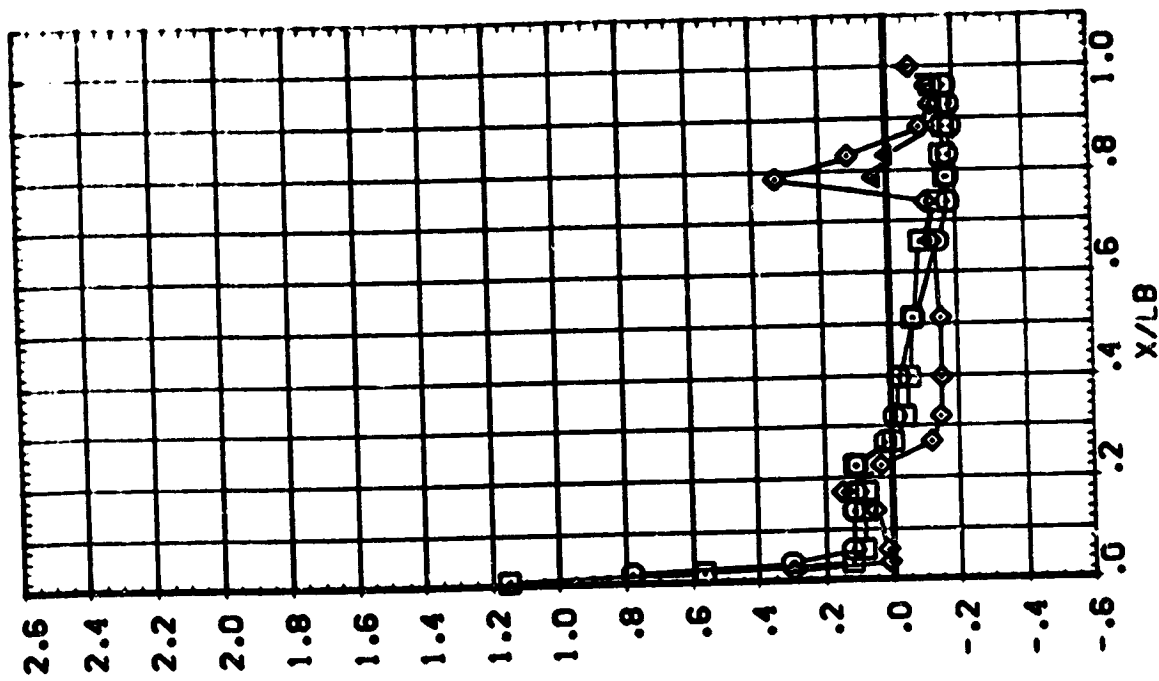
LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

PARAMETRIC VALUES
 70.000 RUDER -25.000
 .000 RUDR 40.000

ALPHA
 ELEVON

PHI: BETA MACH
 70.000 -6.48C 2.498
 90.000 -3.37C
 120.000
 135.000

SYMBOL
 O
 I
 Δ



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

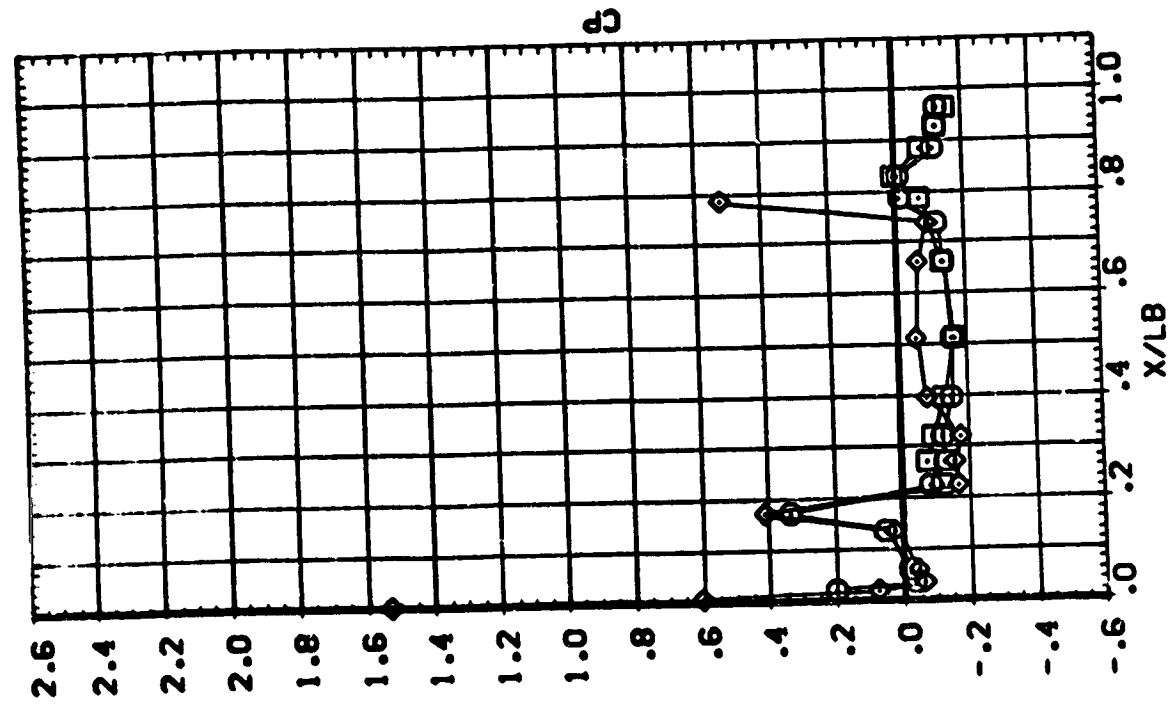
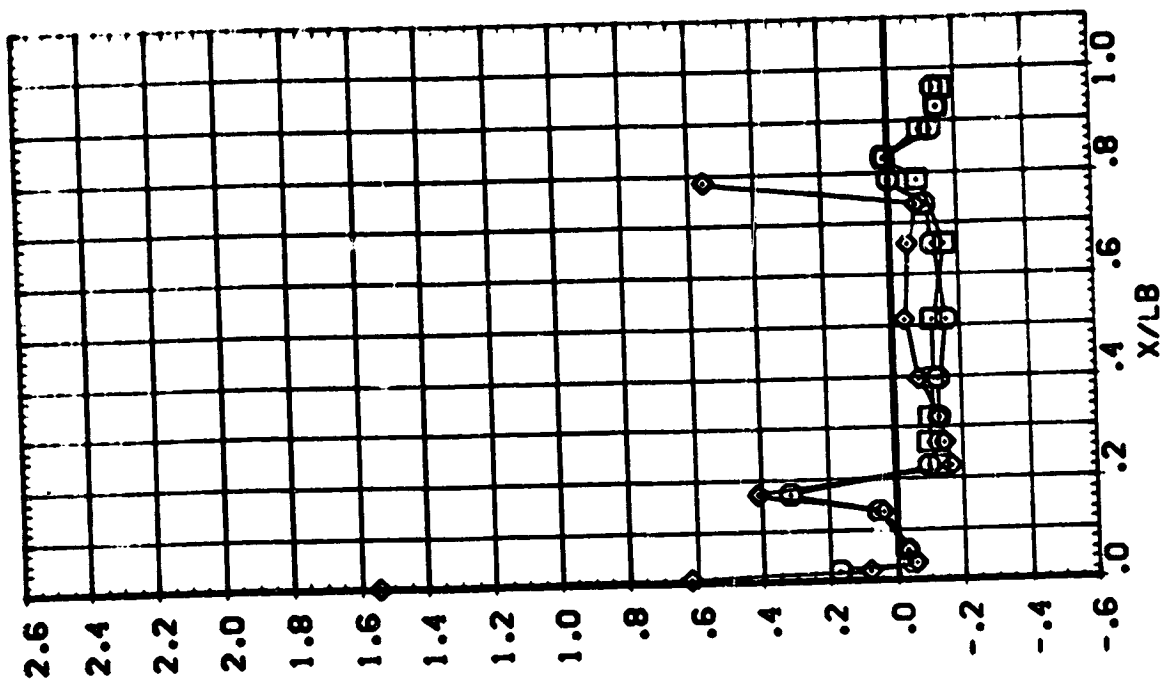
III

ORBITER FUSELAGE (R83807)

AVS 87-707 3A12 02A

PARAMETRIC VALUES
 70.000 R.000R 70.000
 .000 R.00LR 40.500

SYMBOL PAI BE TA WACH
 150.000 -6.480 2.498
 165.000 -3.370
 180.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

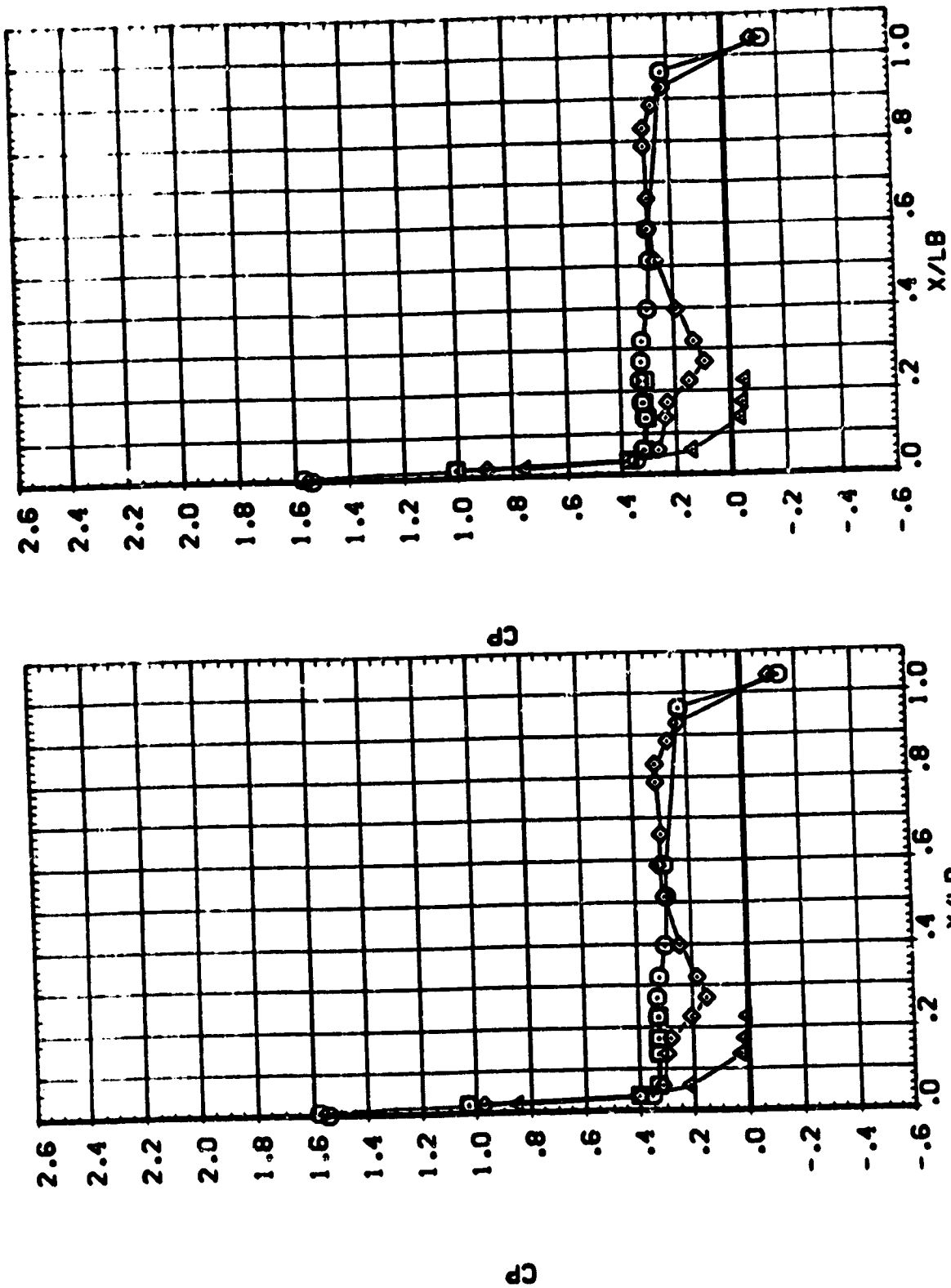
CRBITER FUSELAGE (RB0907)

AVES 87-707 GA:2 02A

SYSC: ○ ○ ○ △

BE'A MACH
 .300 2.498
 20.000 3.040
 40.000
 50.000

PARAM'RIC VALUES
 20.000 20.000 20.000
 .000 .000 .000
 ALPHA ELEVON



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

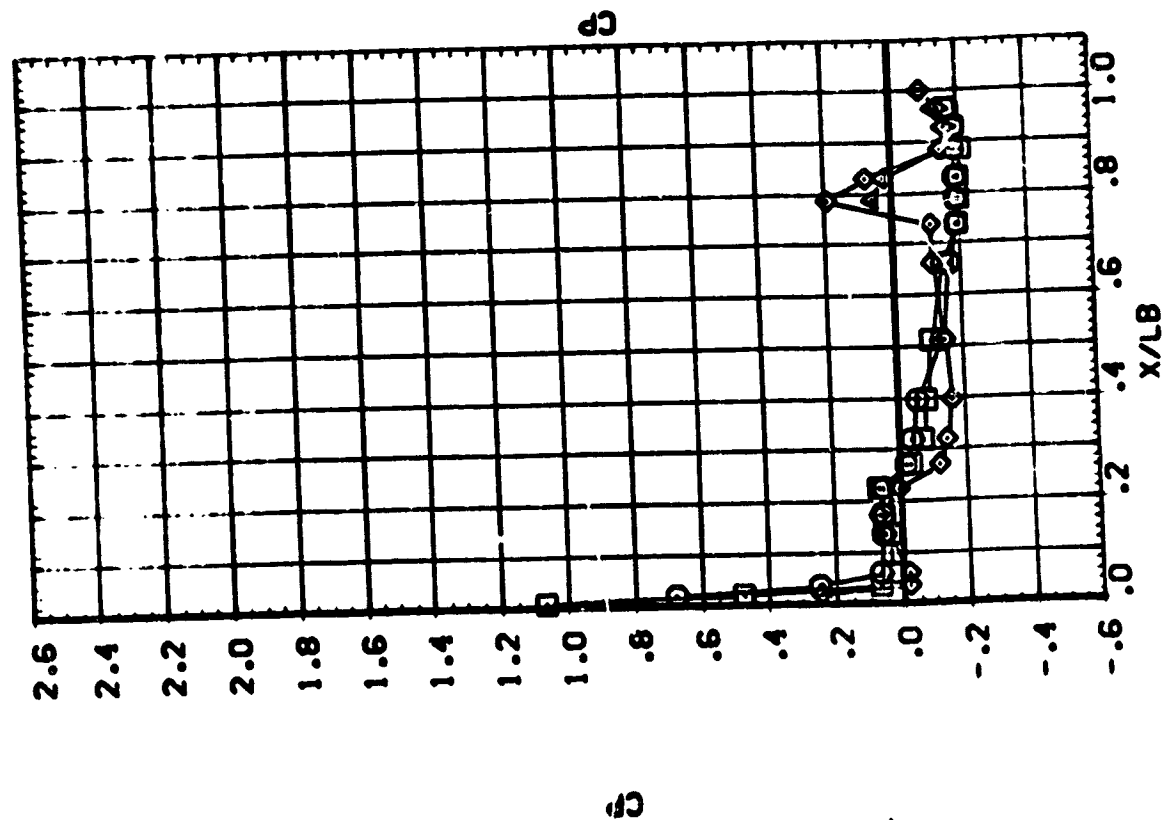
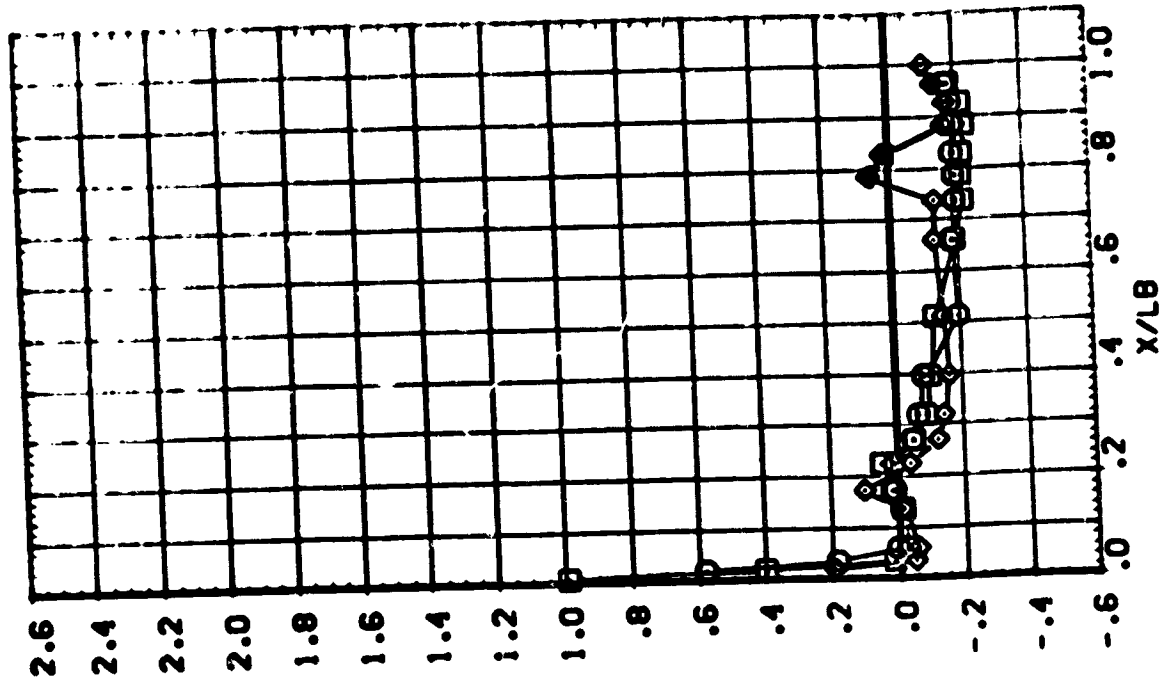
ORBITER FUSELAGE (RBC307)

PARAMETRIC VALUES
 A.P.M. 70.000 80.000 90.000
 ELEVATION .500 .000 .000

AVES 87-707 3A12 32A

Phi BETA MACH
 70.000 .150 2.450
 80.000 3.040
 90.000
 35.000

SYMBOL
 ○ □ ◇



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

CRBITER FUSELAGE (R80307)

AVES 87-007 CA:7 C2A

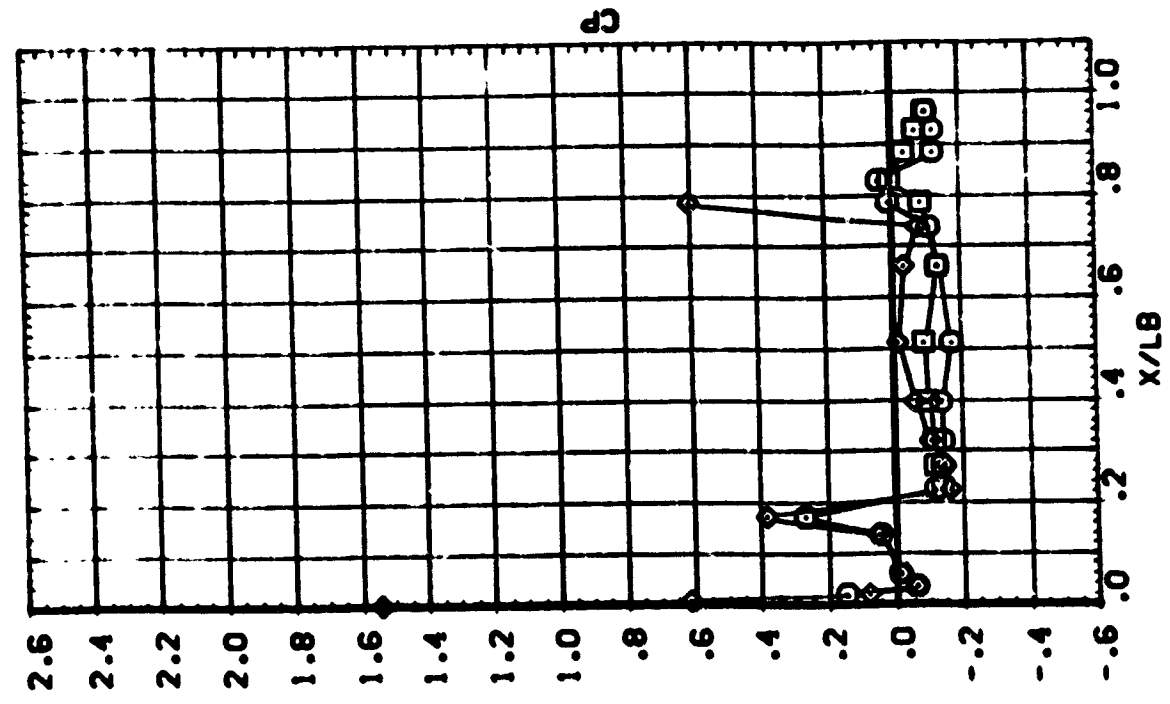
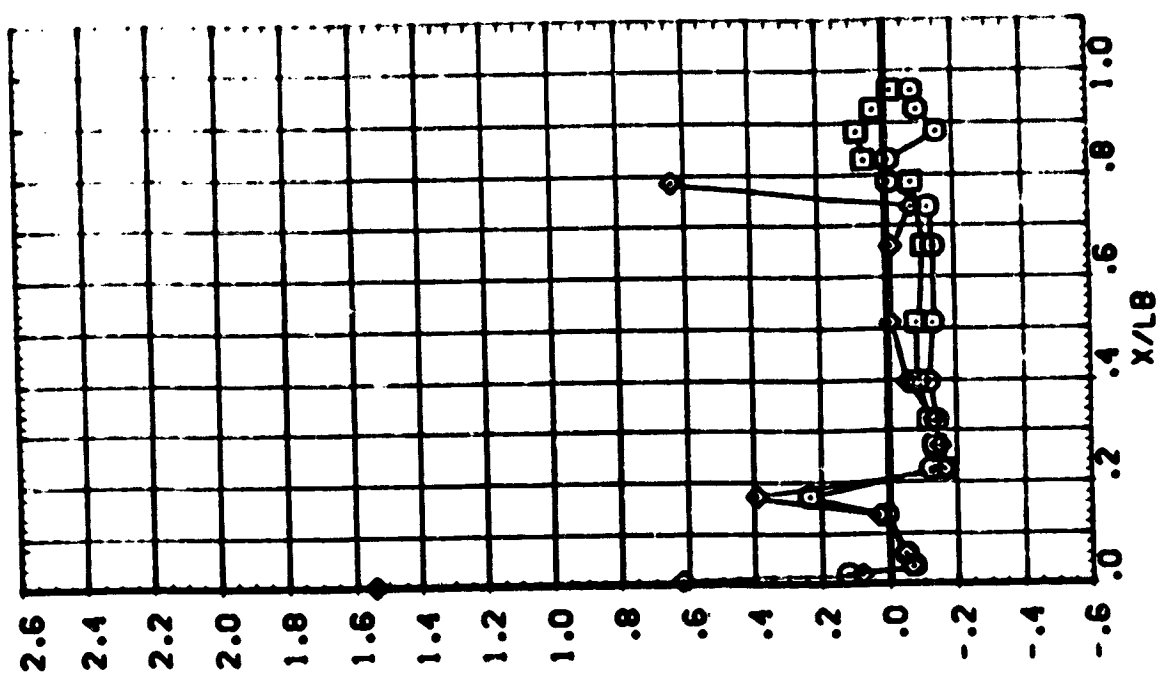
PARAMETRIC VALUES
 70.000 8.000 70.000
 .000 .000 40.000

ALPHA
 ELEVON

SYMBOL
 50.000
 100.000
 150.000
 200.000

SE-A
 1.50
 1.04

W/C
 2.490



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

CRBITER FUSELAGE (RBQB07)

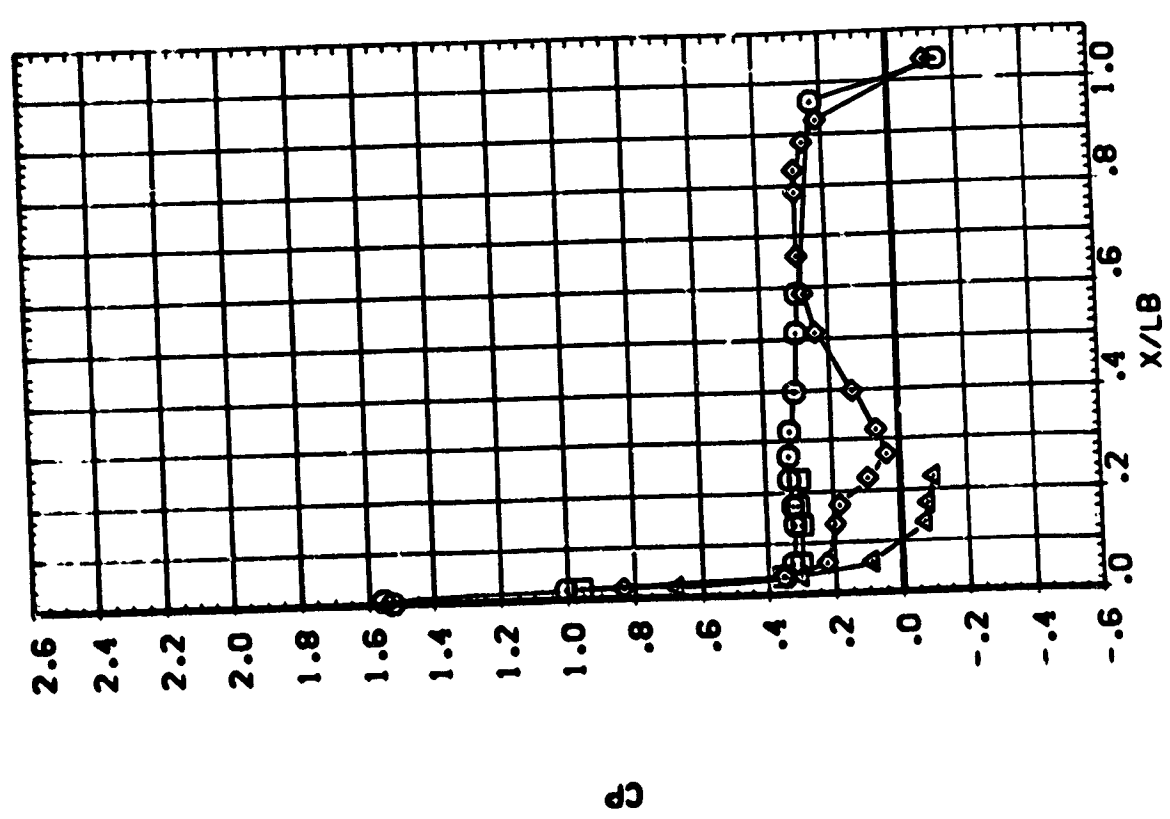
AVES 87-707 CA:2 C2A

SYMBOL
 ○
 □
 △

ALPHA
 .000
 70.000
 40.000
 50.000

ALPHA
 FLEVEN

PARAMETRIC VALUES
 70.000 0.000 70.000
 .000 0.000 40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (R9G8C7)

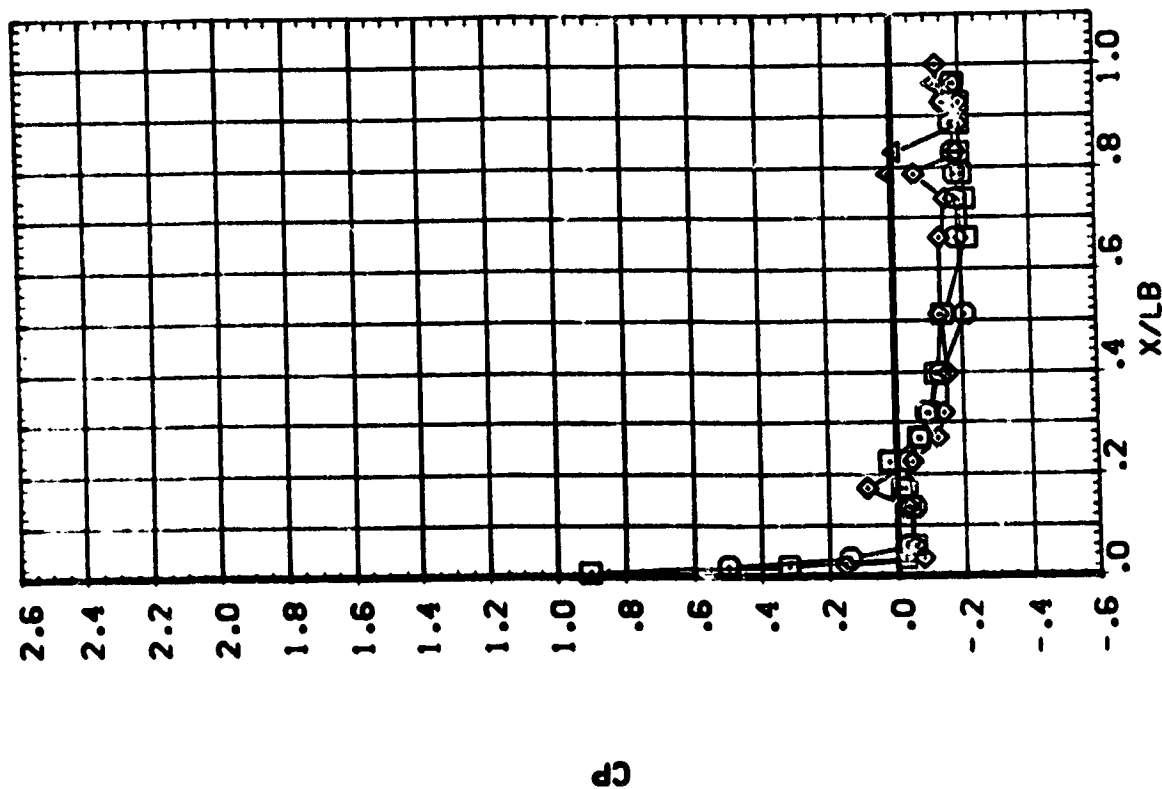
AVES 87-7C7 CA:2 32A

SYNOPSIS
O: 10
A

PA: 70.000
90.000
170.000
35.000

BETA 6.240
WACH 2.498

PARAMETRIC VALUES
ALPHA 70.000
ELEVON .000
RUDER 20.000
RDF:R 45.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RB0807)

AVES 87-707 CA12 C2A

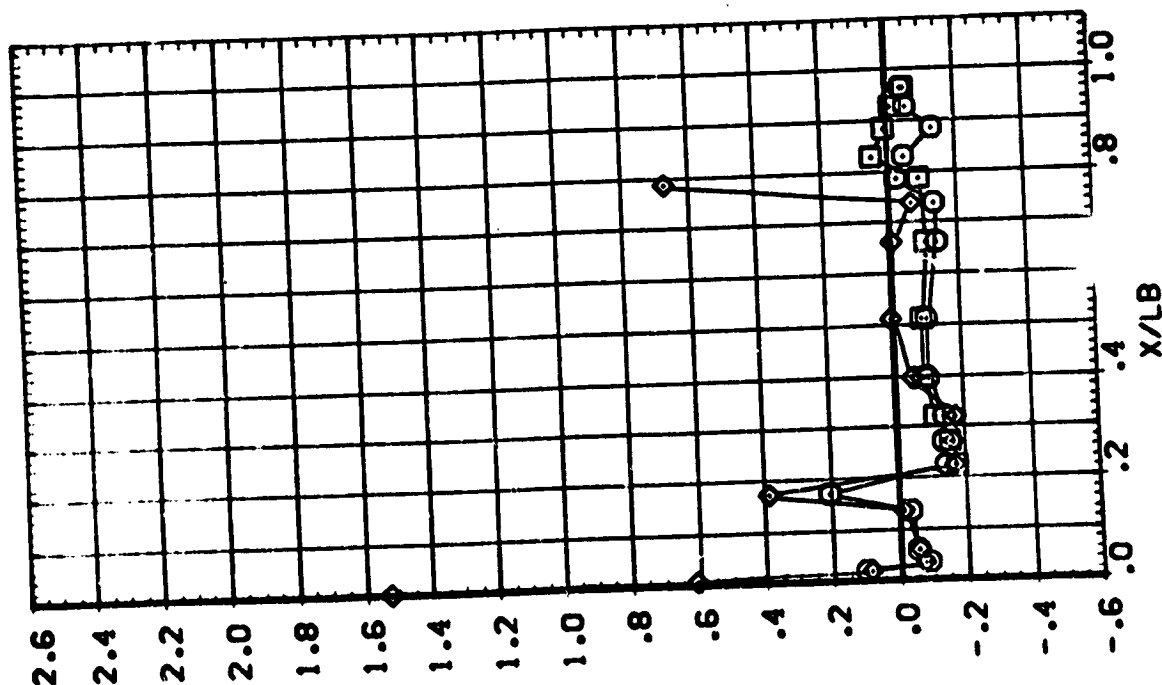
SYMBOL
 ○ □ ◇

PHI
 150.000
 165.000
 180.000

BETA
 6.240

MACH
 2.498

PARAMETRIC VALUES
 20.000 RUDER
 .000 RUDLR
 -20.000
 40.000



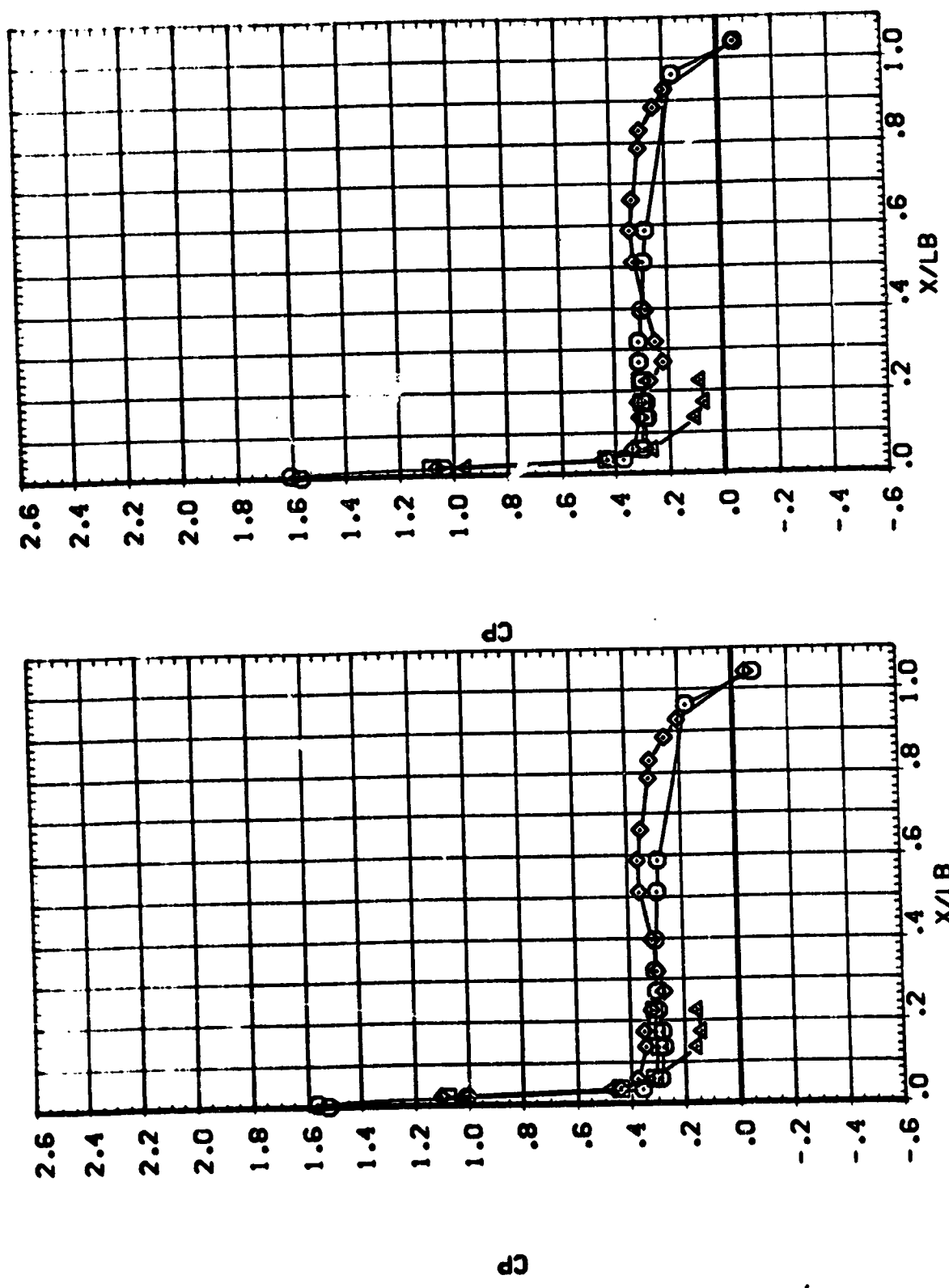
LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

SYMBOL
 ○ 10.000
 □ 20.000
 ◇ 40.000
 △ 55.000

BETA
 -6.710
 3.440

WACH
 3.500

PARAMETRIC VALUES
 ALPHA 20.000 RUDER 20.000
 ELEVON .000 RUDLR 40.000

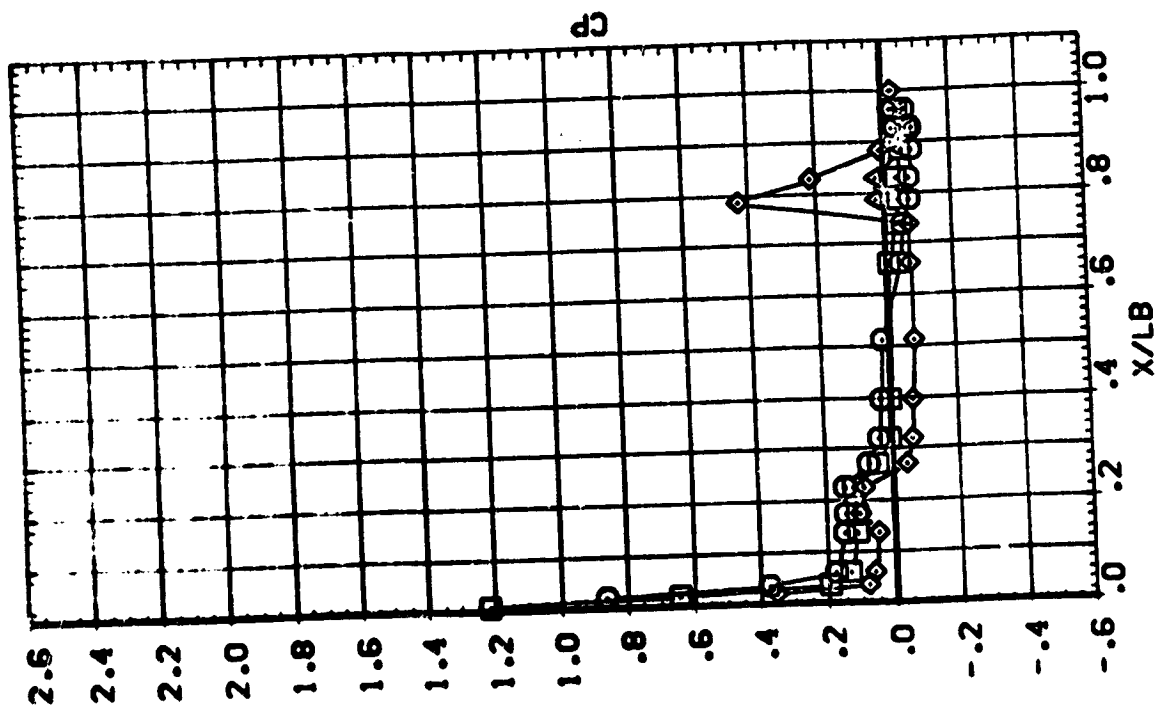
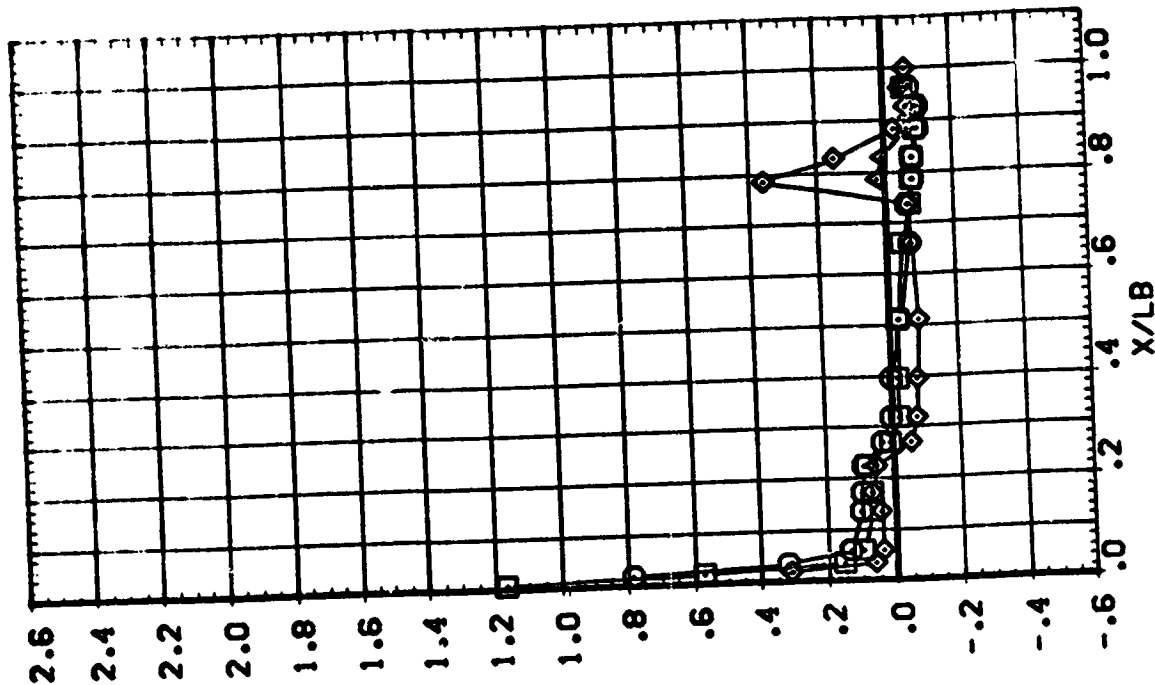


LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

SYMBOL
○
◇
△

Q: 70.000
90.000
120.000
150.000
BETA -6.710
-3.440
MACH 3.50

PARAMETRIC VALUES
20.000 RUDDER
.000 RUDDER
20.000
40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

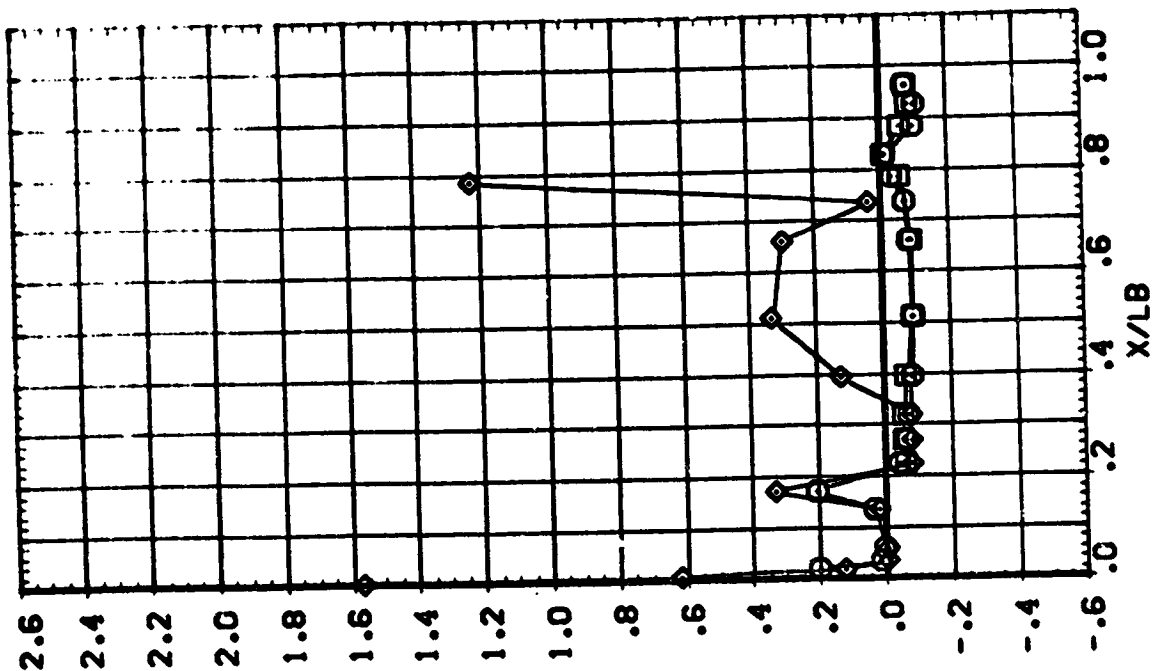
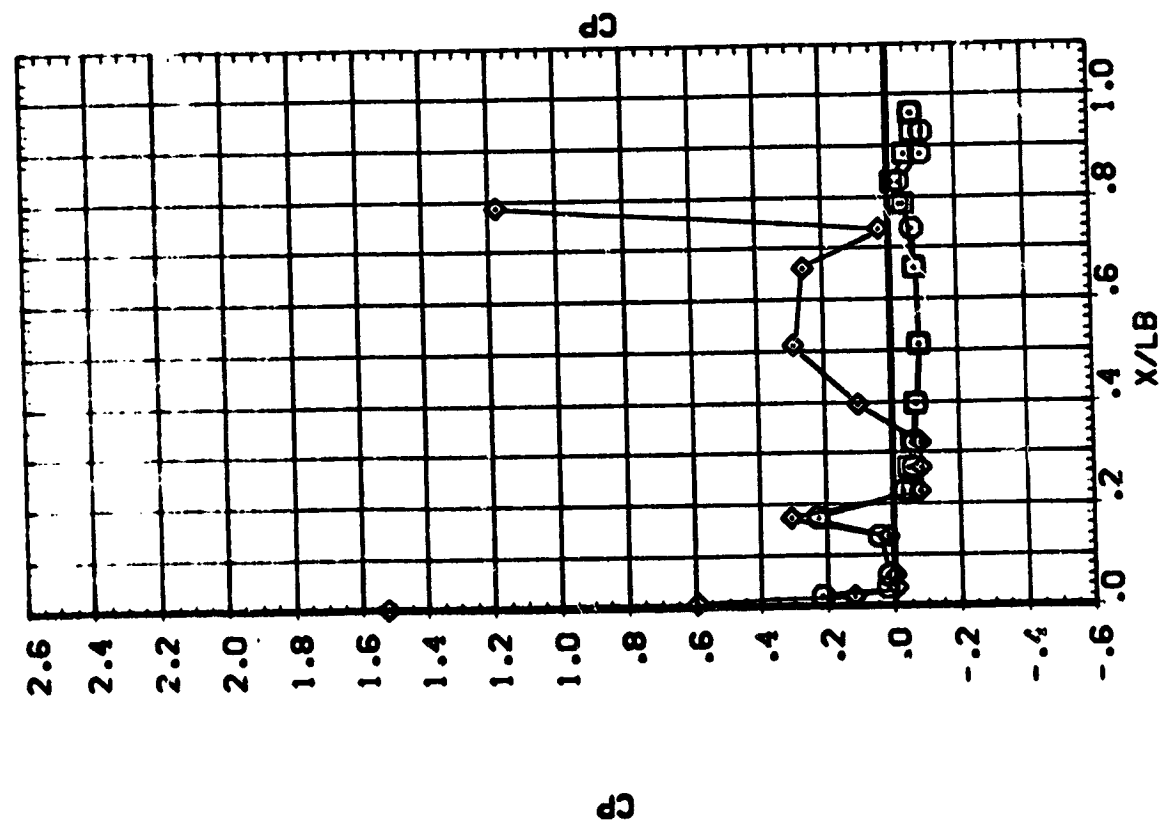
SYMBOL
 ()
 ◇

Q_∞ 150.000
 150.000
 180.000

β_∞ 5.710
 -3.440

WAC 3.501

PARAMETRIC VALUES
 ALPHA 20.000
 ELEVON .000
 RUDLER 40.000
 RUDLER 40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

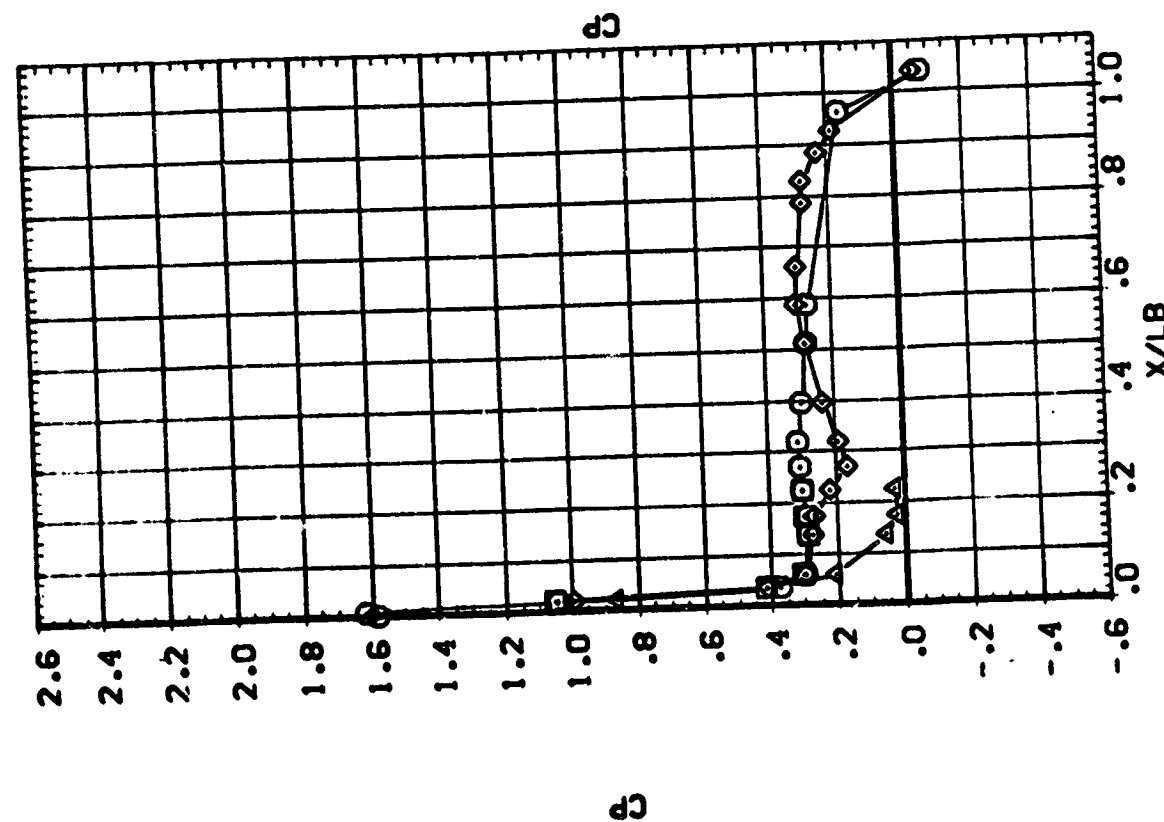
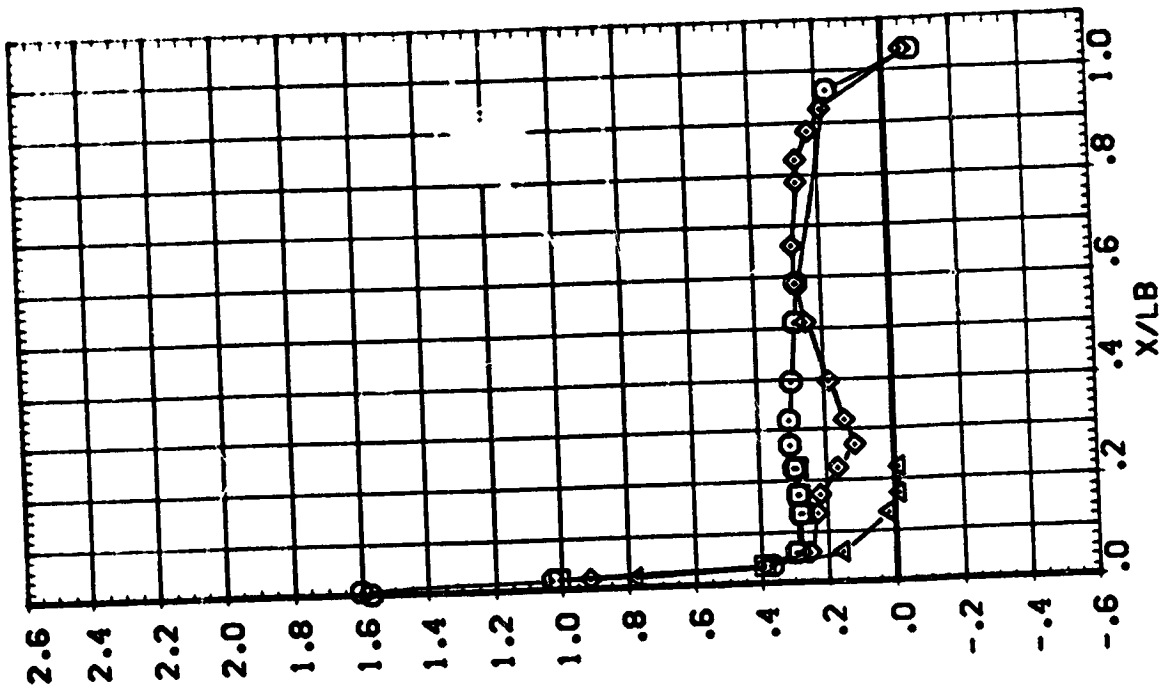
ORBITER FUSELAGE (RBQB07)

AVES 87-707 0A12 02A

PARAMETRIC VALUES
 20.000 RUDER -20.000
 .000 RUDLR 40.000
 ALPHA ELEVON

SYMBOL
 □ 0.000
 ○ 20.000
 ◇ 40.000
 △ 55.000

BETA 3.50
 3.16
 3.50



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RB3BC7)

AVES 87-707 GA12 C2A

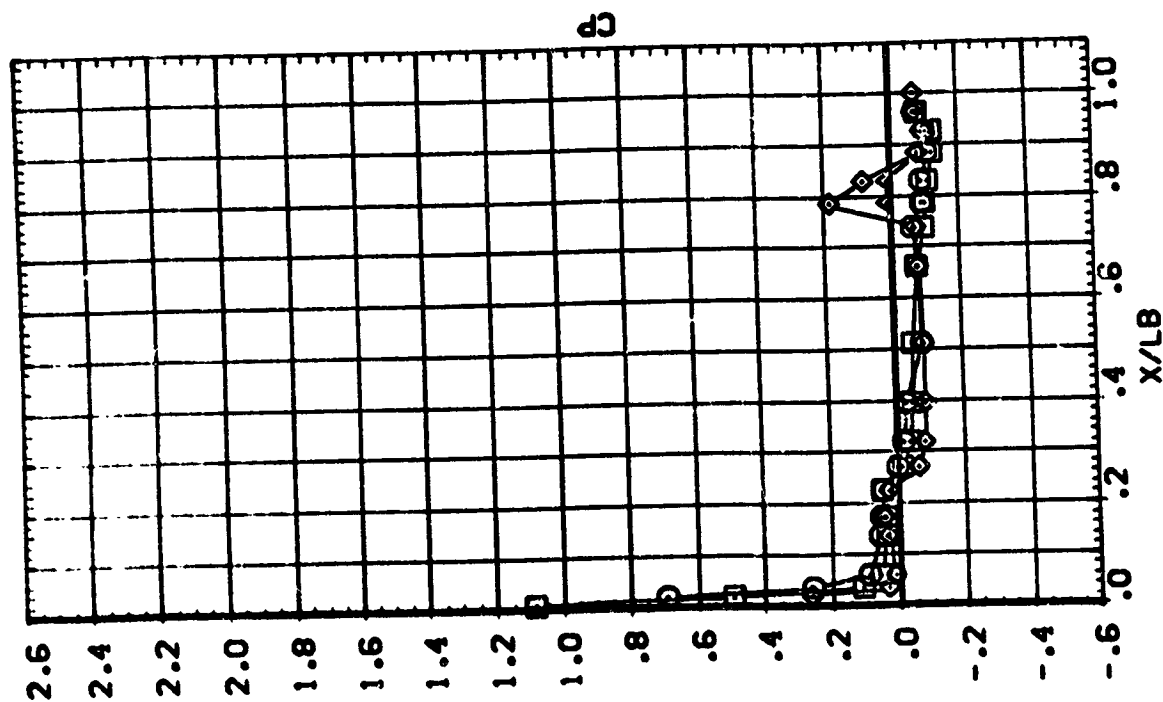
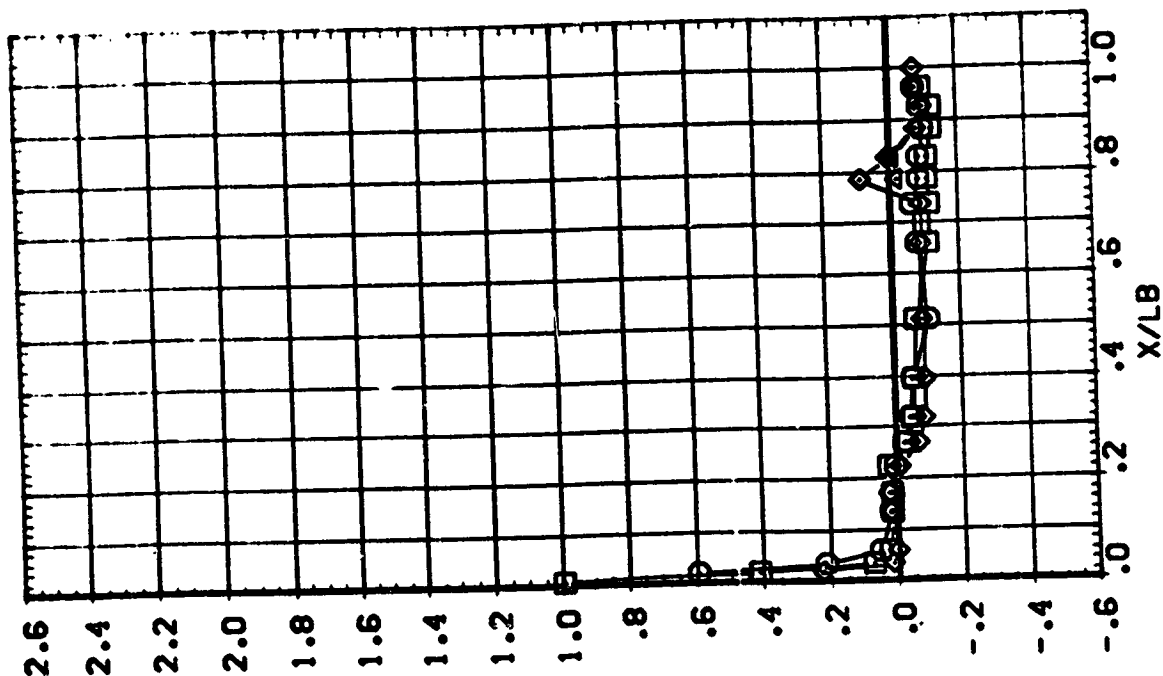
SYMB
○
□
◇
△

Q1 70.000
Q2 90.000
Q3 120.000
Q4 135.000

BETA .150
3.162

WAD 3.501

PARAMETRIC VALUES
ALPHA 20.000
ELEV 0.000
RORDER 20.000
RDFLP 40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

AMES 87-707 3A:2 32A

SYNOPSIS

4-3333

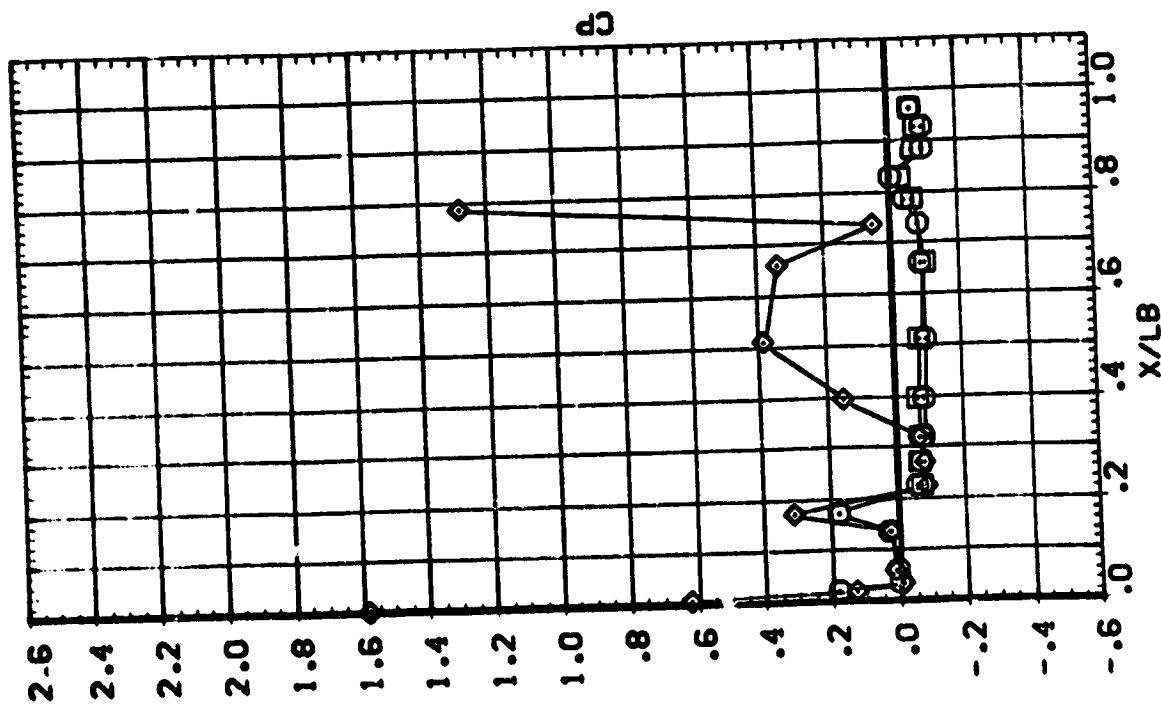
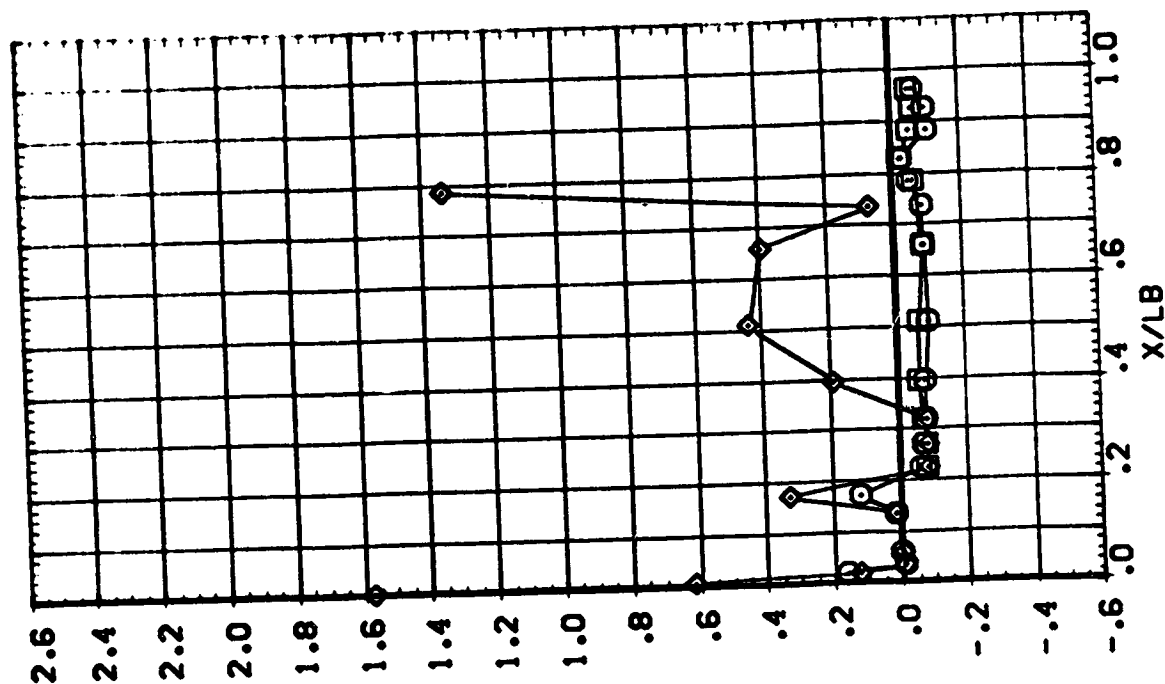
BE-A 3:53

3.50
3.50

ALPHA
ELEVON

PARAMETRIC VALUES

88



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (R83807)

AVES 87-707 GA12 C2A

SYMBOL
 ○
 ◇
 △

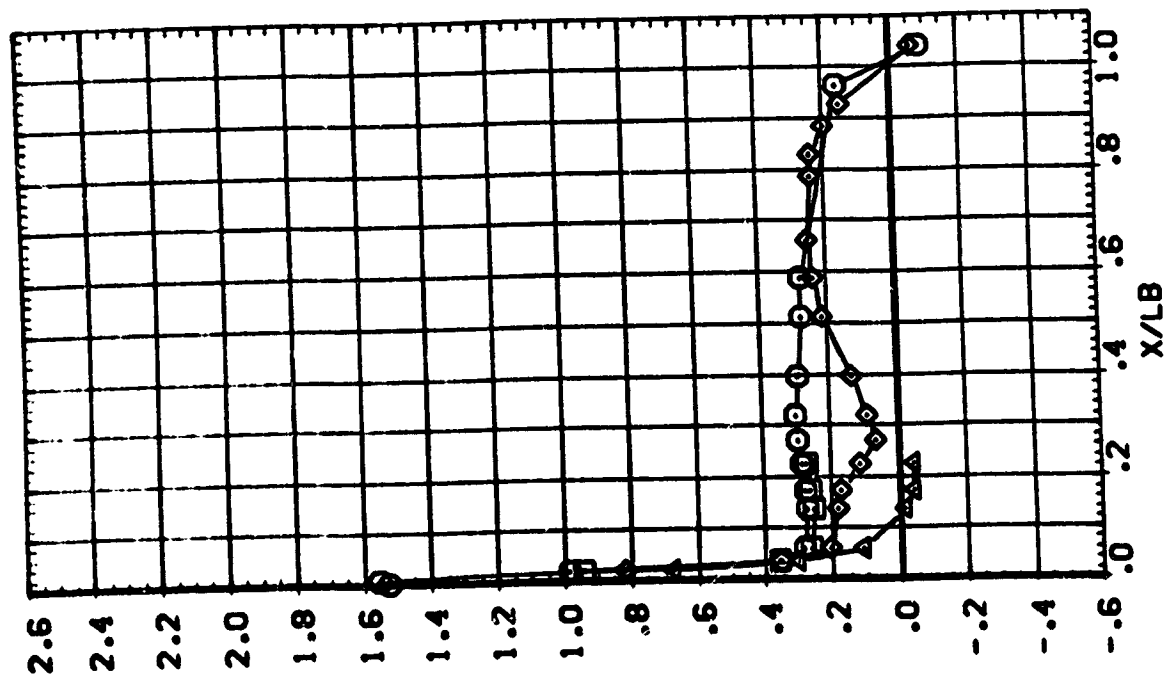
REYNOLDS
 .000
 20.000
 40.000
 55.000

SECT A
 6.470

MACH
 3.50

PARAMETRIC VALUES
 20.000 RUDER
 .000 RUDER
 20.000
 40.000

ALPHA
 ELEVON



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

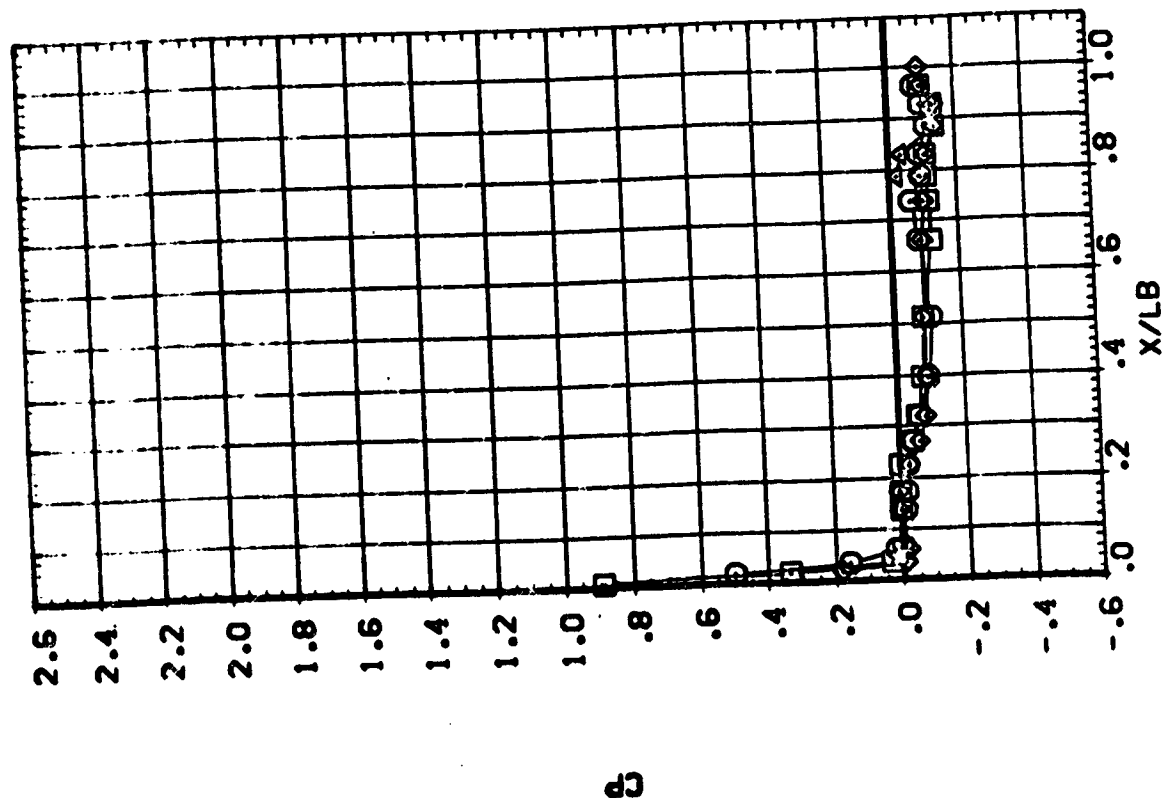
ORBITER FUSELAGE (RBG307)

AVES 87-707 GA:2 02A

SYMBOL
 70.000
 90.000
 120.000
 135.000

BETA 6.47C
 MAG- 3.501

PARAMETRIC VALUES
 70.000 RUDER
 .000 RUD.R
 20.000
 40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBQB07)

PARAMETRIC VALUES
 20.000 RUDER
 .000 R.D.F.
 20.000
 45.000

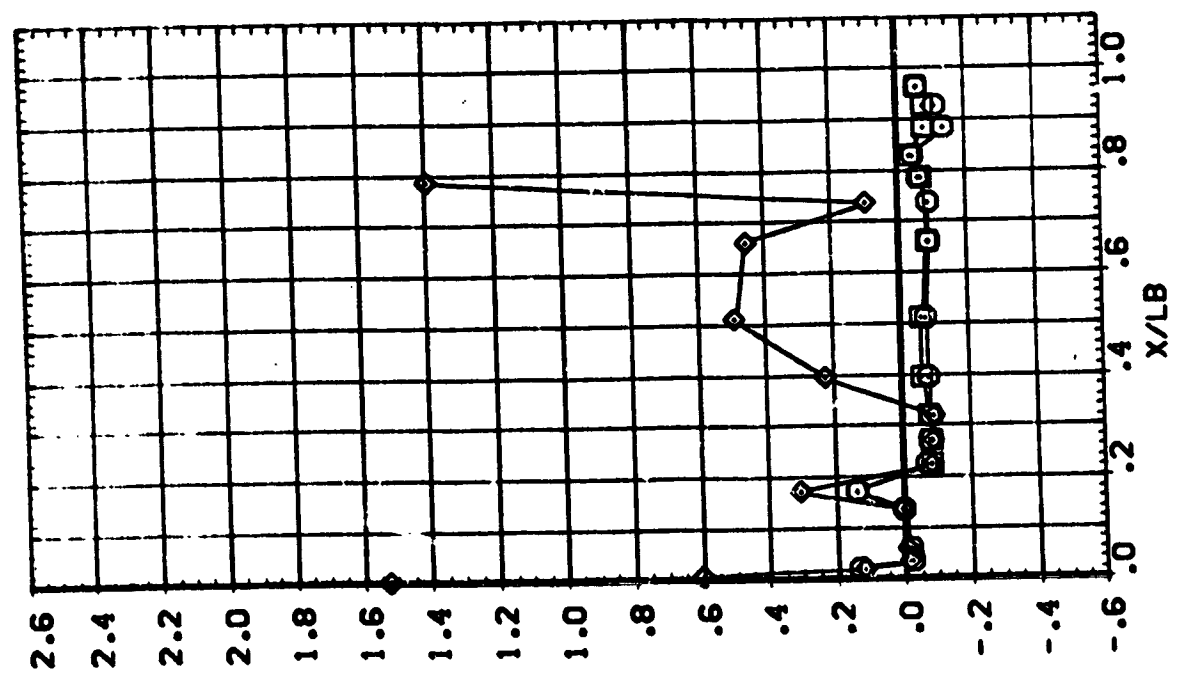
ALPHA
 ELEVON

AVES 87-707 3A12 C2A

MAI
 50.000
 165.000
 180.000

BETA
 6.470

MACH
 3.500



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBCB18)

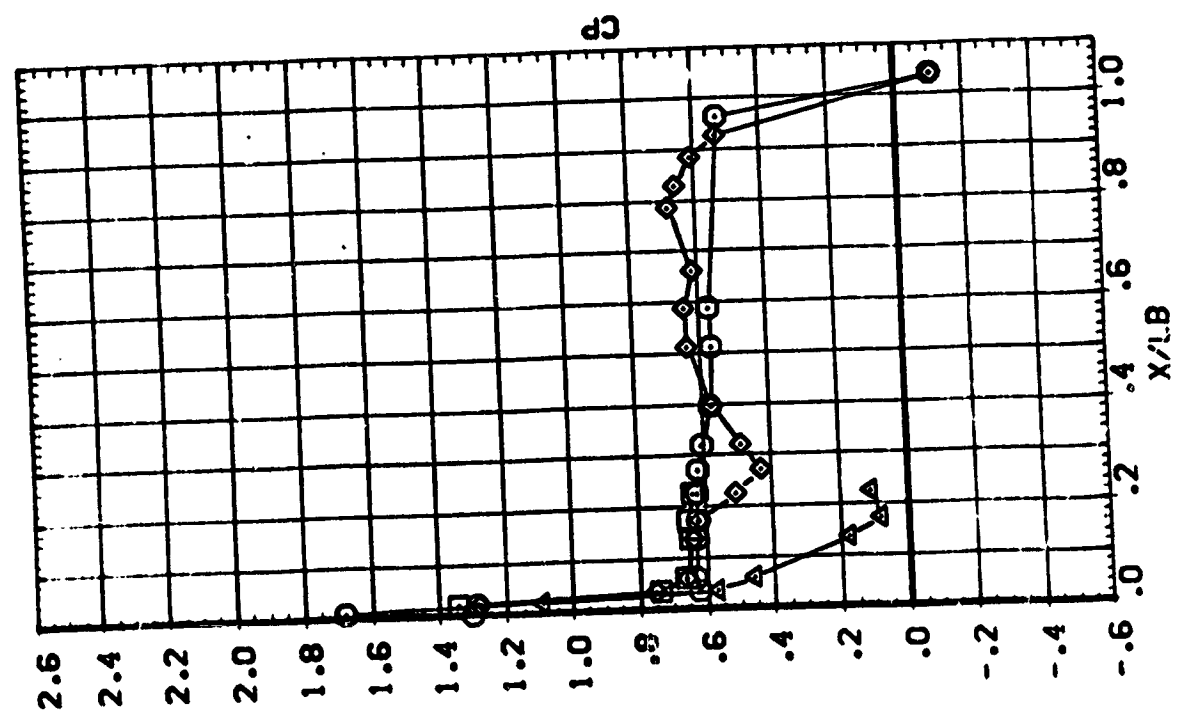
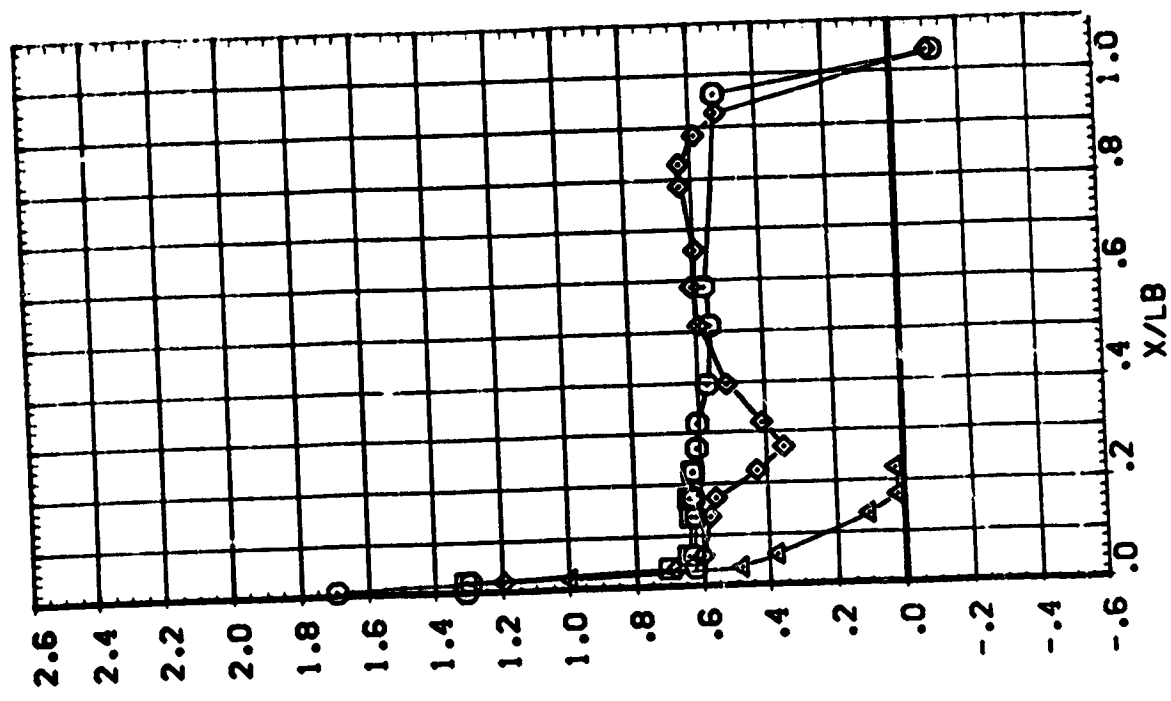
PARAMETRIC VALUES
 30.000 R/OOR .000
 .000 R/OFLR 40.000

ALPHA
 ELEVON

AVES 87-707 CA:2 32A

BE'A MACH
 6.480 2.498
 3.310

5-800
 .000
 70.000
 40.000
 55.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (R803:8)

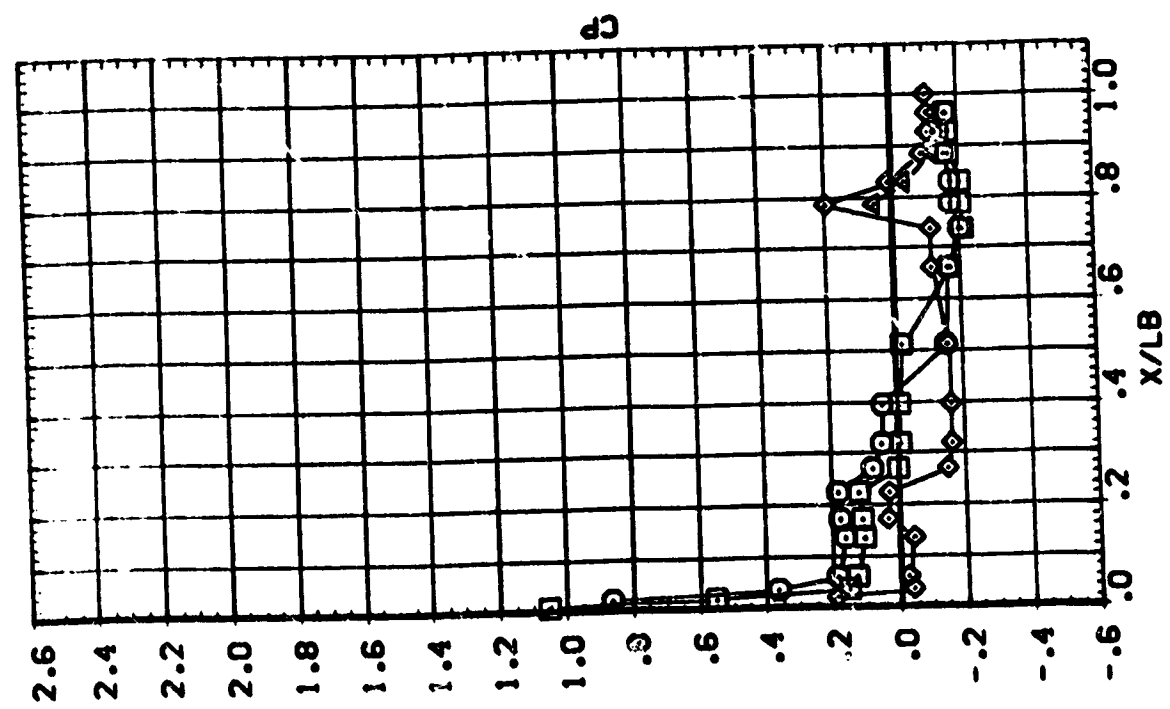
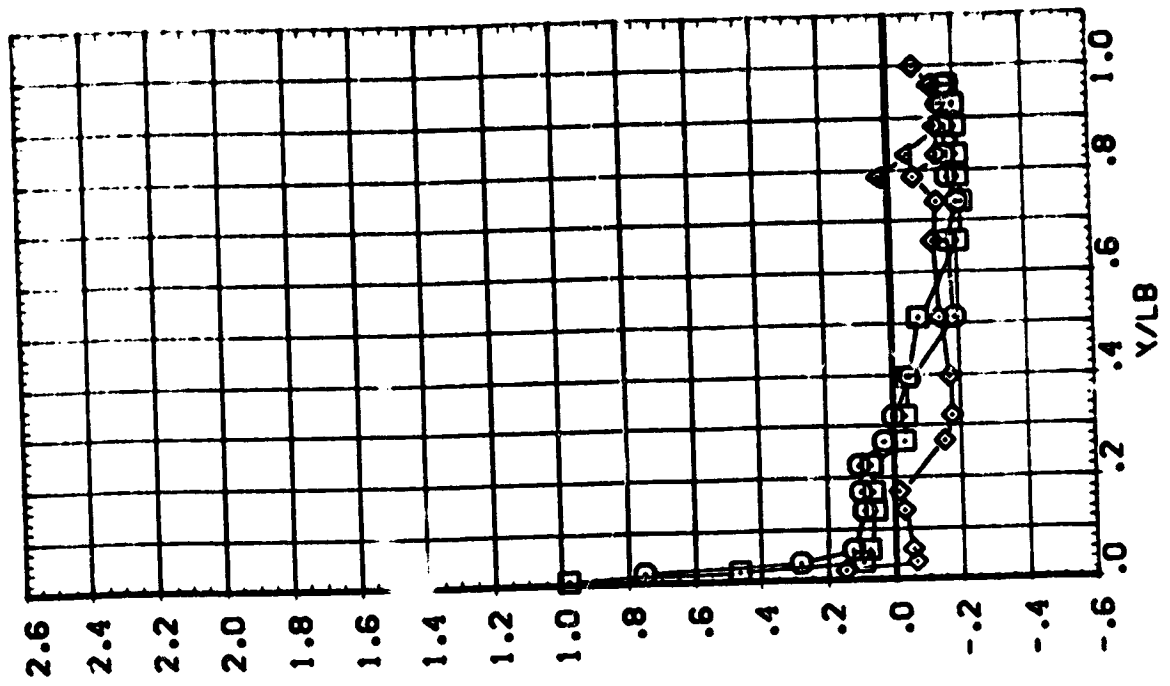
AVES 87-707 0A12 C2A

PARAMETRIC VALUES
 30.000 RDOOR .000
 .000 RDOFLR 40.000

ALPHA
 ELEVON

PH: 70.000 MACH 2.498
 90.000
 120.000
 135.000

SYMBOL
 ○ □ ◇ △



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES



AVES 87-707 CA:2 C2A

ORBITER FUSELAGE (RB0818)

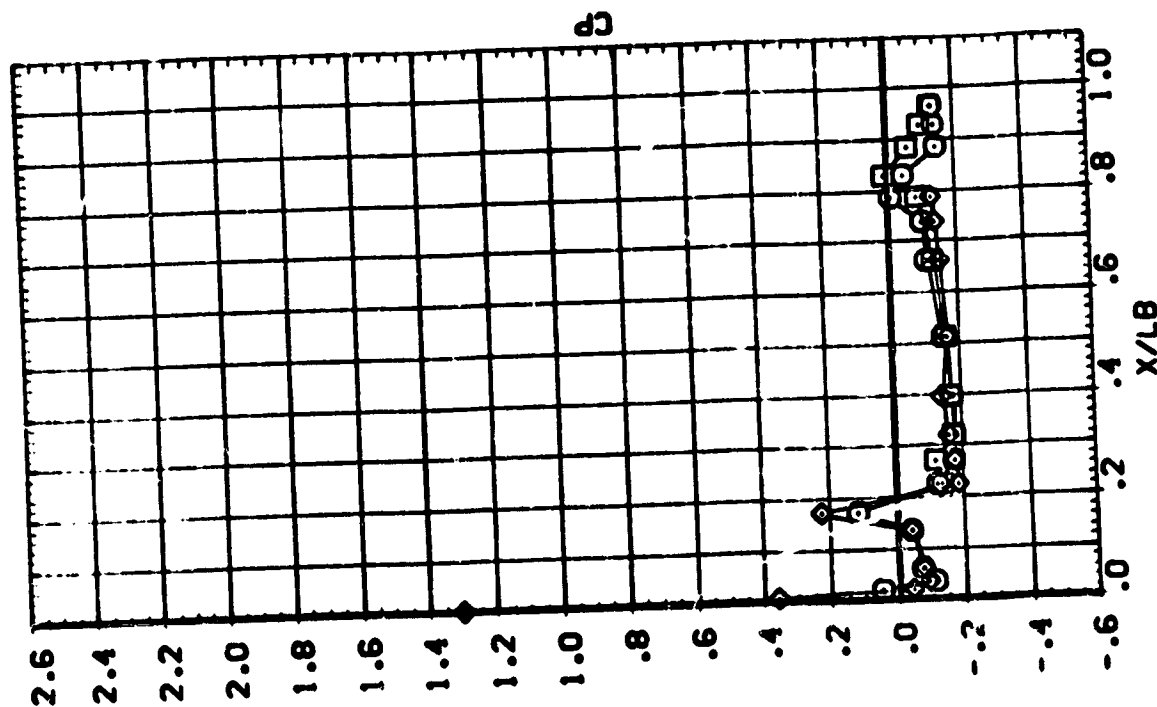
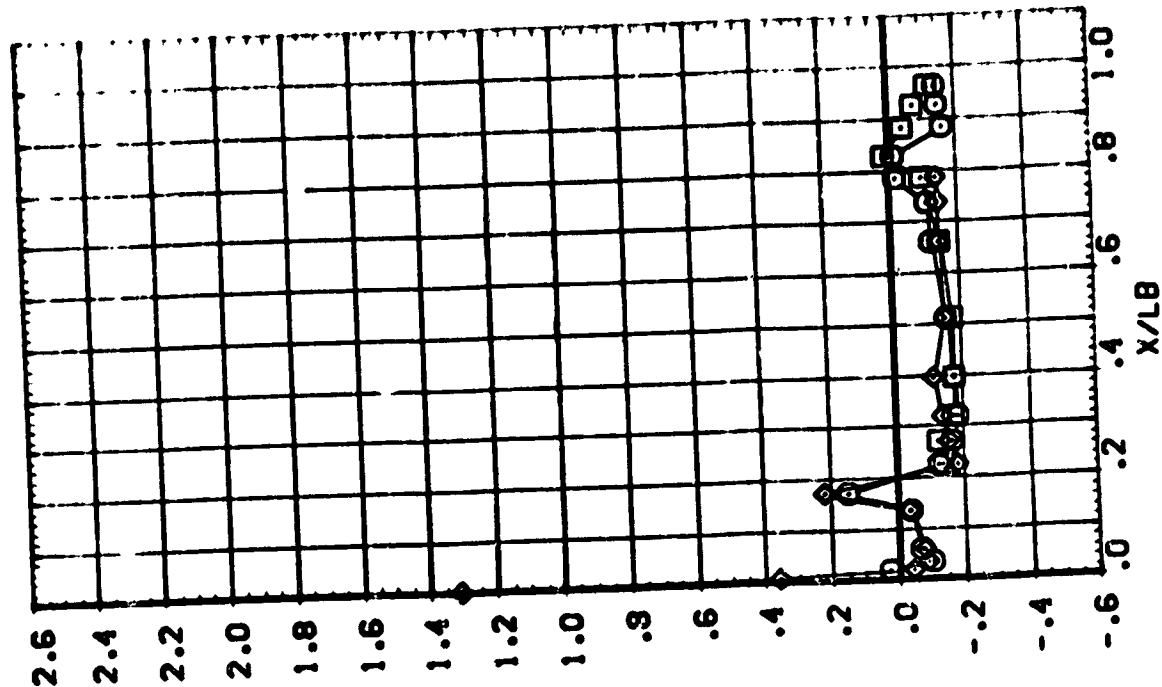
SYNCH
0000

PA: 152.752
:65.000
:80.000

BE: A
-6.48C
-3.31C

WAC: 2.498

PARAMETRIC VALUES
ALPHA 30.000
ELEVON .000
RUDER 45.000
RUD: 2- 45.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (R30318)

AVS 8" 707 CA:2 C2A

54000

3.500
3.500
55.000

3.500
3.500
55.000

3.500
3.500
55.000

3.500
3.500
55.000

3.500
3.500
55.000

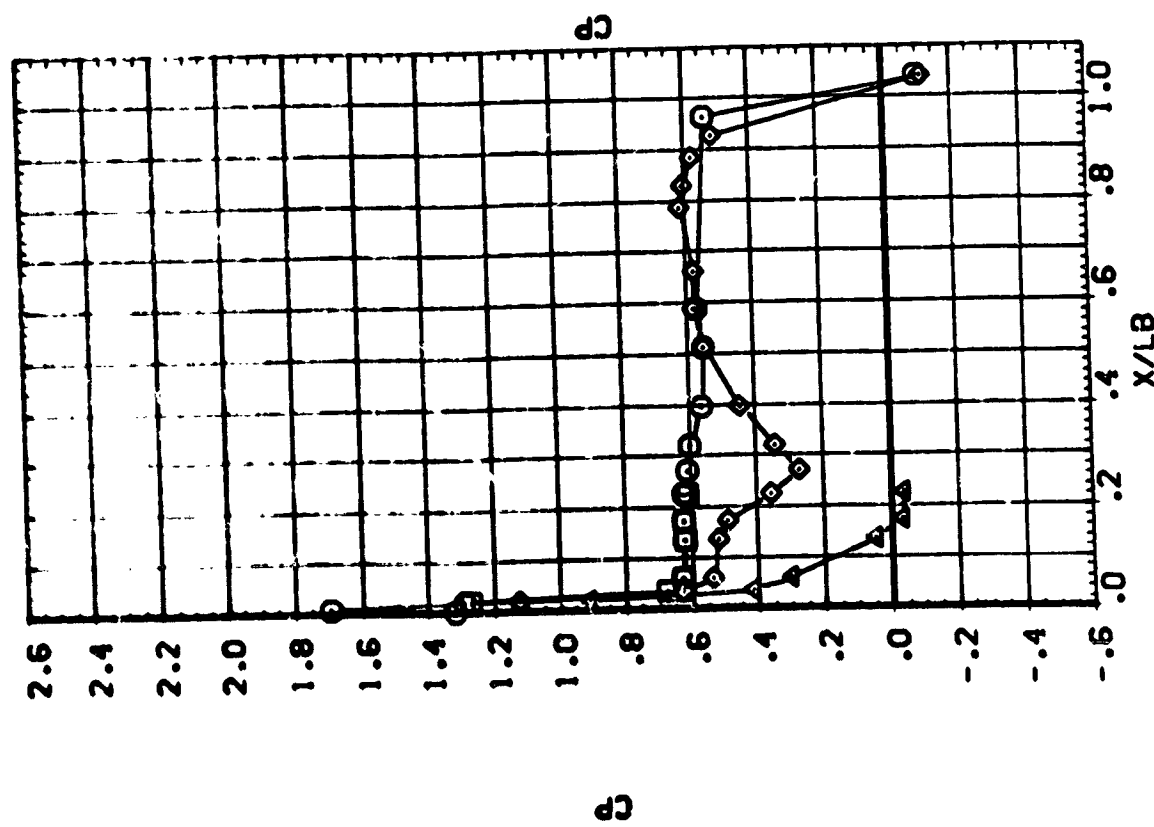
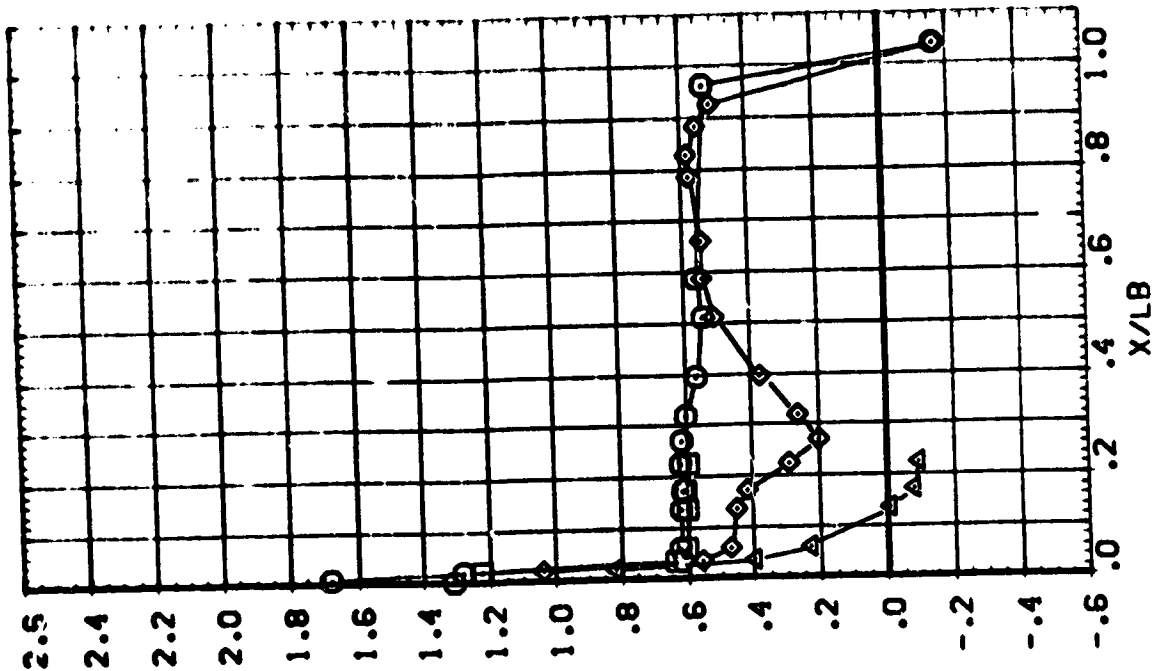
3.500
3.500
55.000

3.500
3.500
55.000

3.500
3.500
55.000

3.500
3.500
55.000

3.500
3.500
55.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RB0B18)

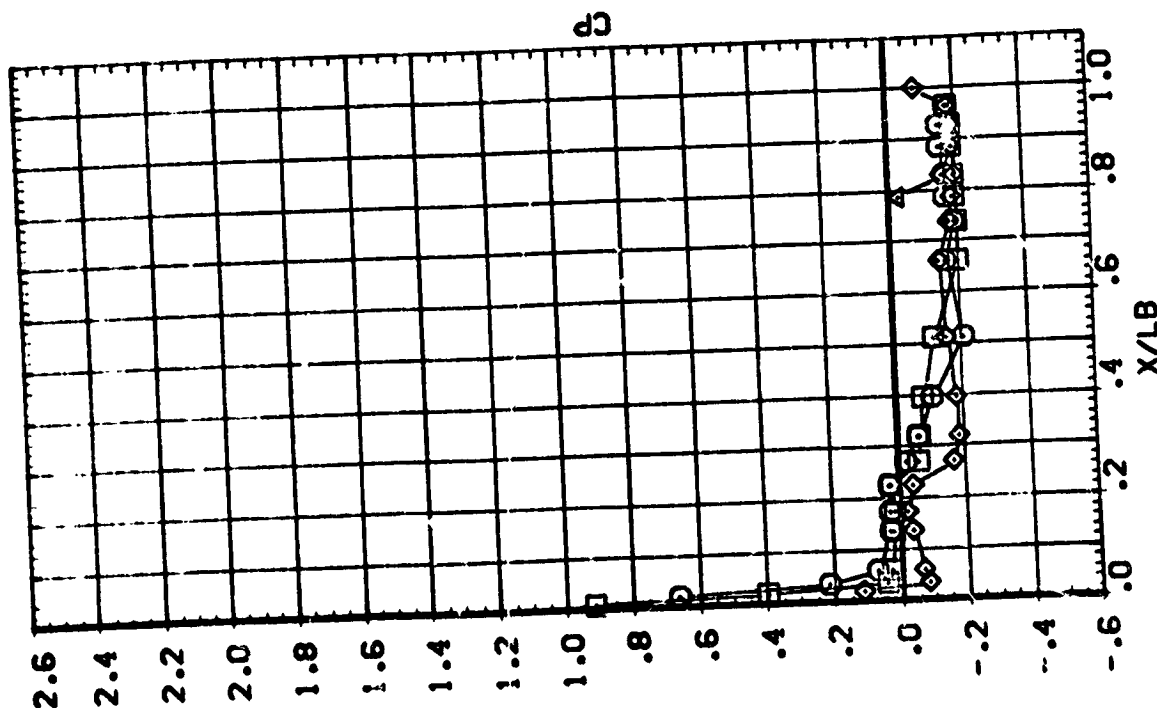
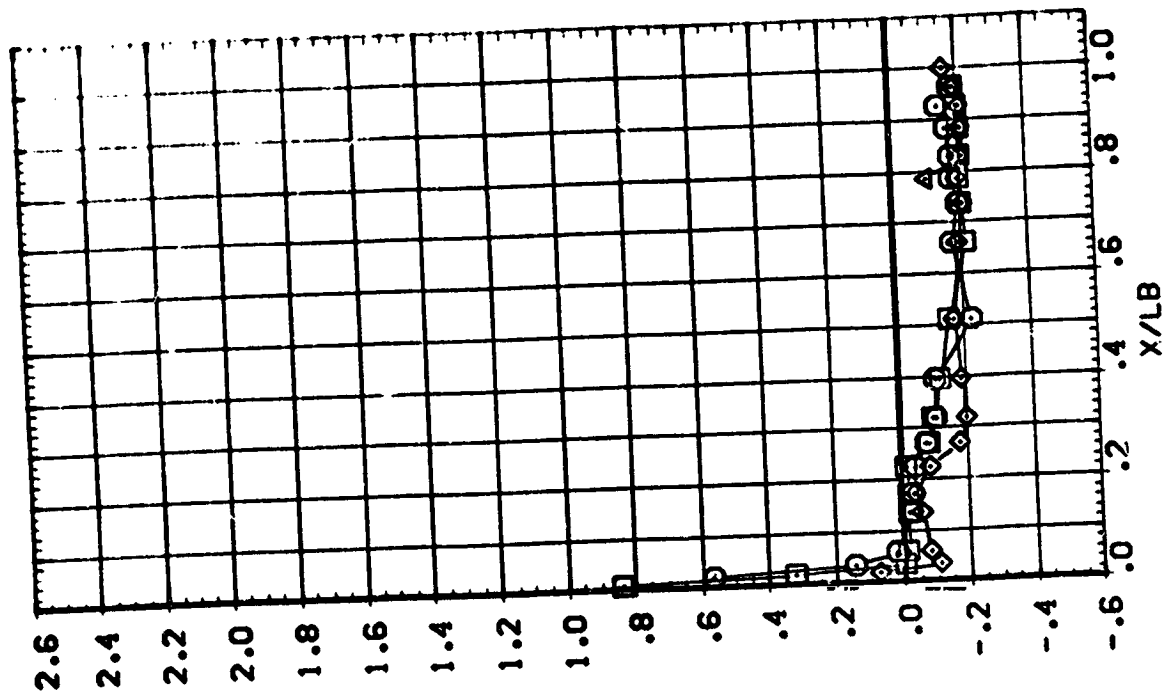
AMES 87-707 CA:2 C2A

PA: 70.000
90.000
:70.000
135.000

BE: A 3.06C
WAC: 2.498

PARAMETRIC VALUES
ALPHA 30.000
ELEVON .000
RJOER 40.000
RJOER 40.000

SYMBOL
O
◇
△



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (R8CB18)

AVES 87-707 0A:2 02A

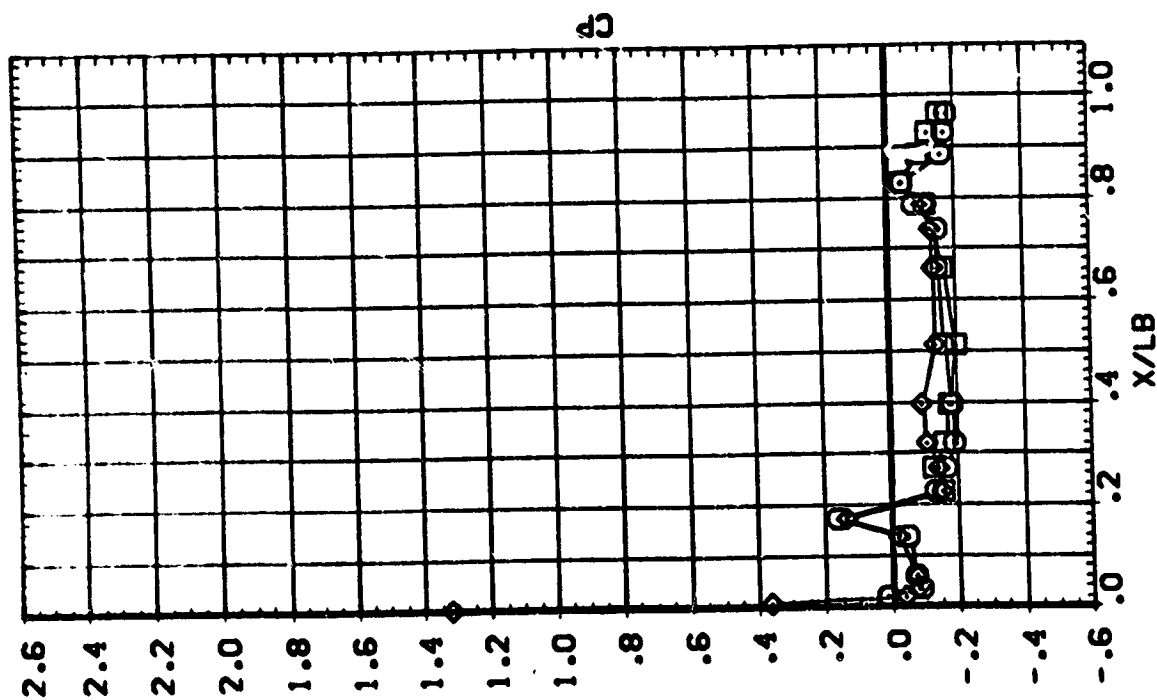
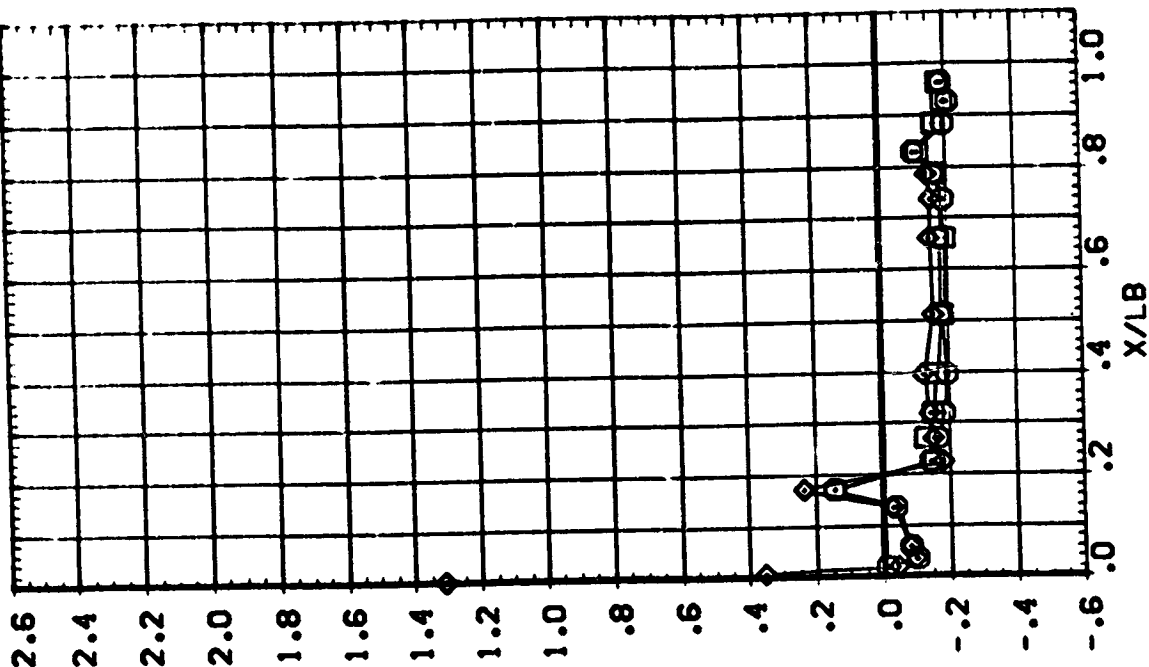
S-100
0.00
0.00

PA: 150.000
165.000
180.000

BETA .130
3.060

MAC- 7.498

PARAMETRIC VALUES
ALPHA 30.000
ELEVON .000
RUDDER 45.000
RUDFLR .000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RB0818)

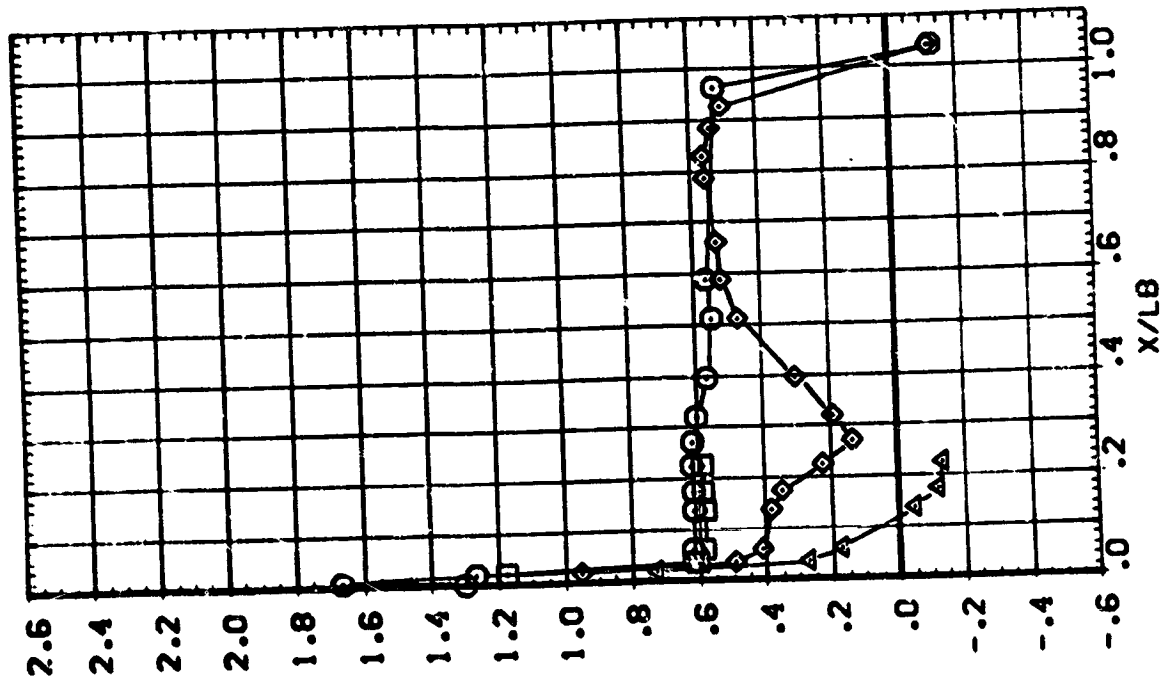
AVES 87-707 CA12 02A

SYMBOL
 ○
 □
 △

PM: .000
 20.000
 40.000
 55.000

BETA 6.240
 MACH 2.498

PARAMETRIC VALUES
 30.000 R/000R
 .000 R/000R
 40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (R80B18)

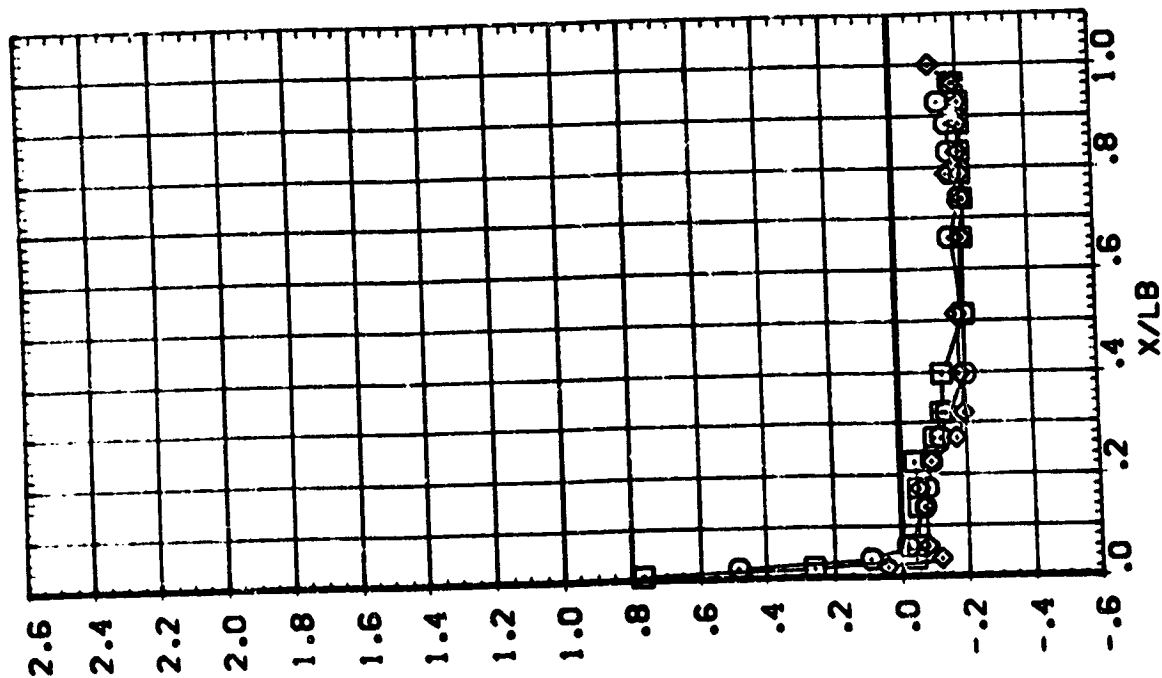
AVES 87-707 CA:2 02A

SYMBOL
 70.000
 90.000
 170.000
 135.000

BE-A MAC-
 5.240 2.498

ALPHA
 ELEVON

PARAMETRIC VALUES
 30.000 RUDER
 .000 RUDLR
 .000 .000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

III

ORBITER FUSELAGE (R8QB18)

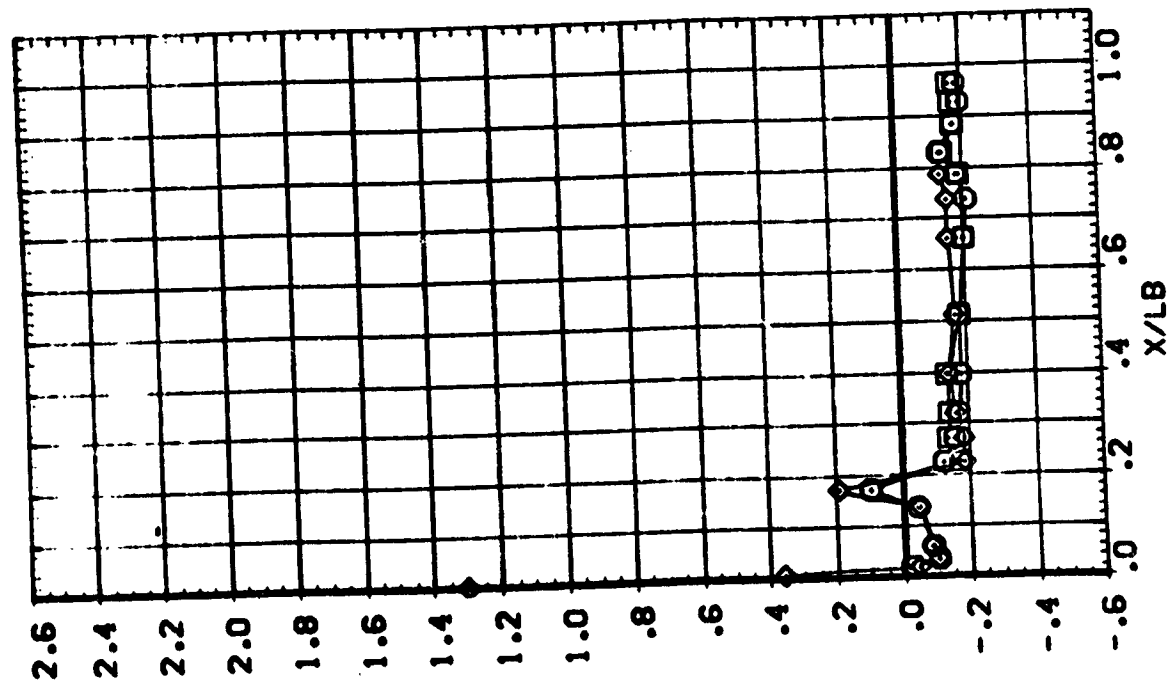
AVES 87-737 3A12 02A

SYMBOL
 150.000
 165.000
 180.000

BEA 5.240
 VACH 7.498

PARAMETRIC VALUES
 30.000 RJOER .000
 .000 RJOFLR 40.000

ALPHA
 ELEVON



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

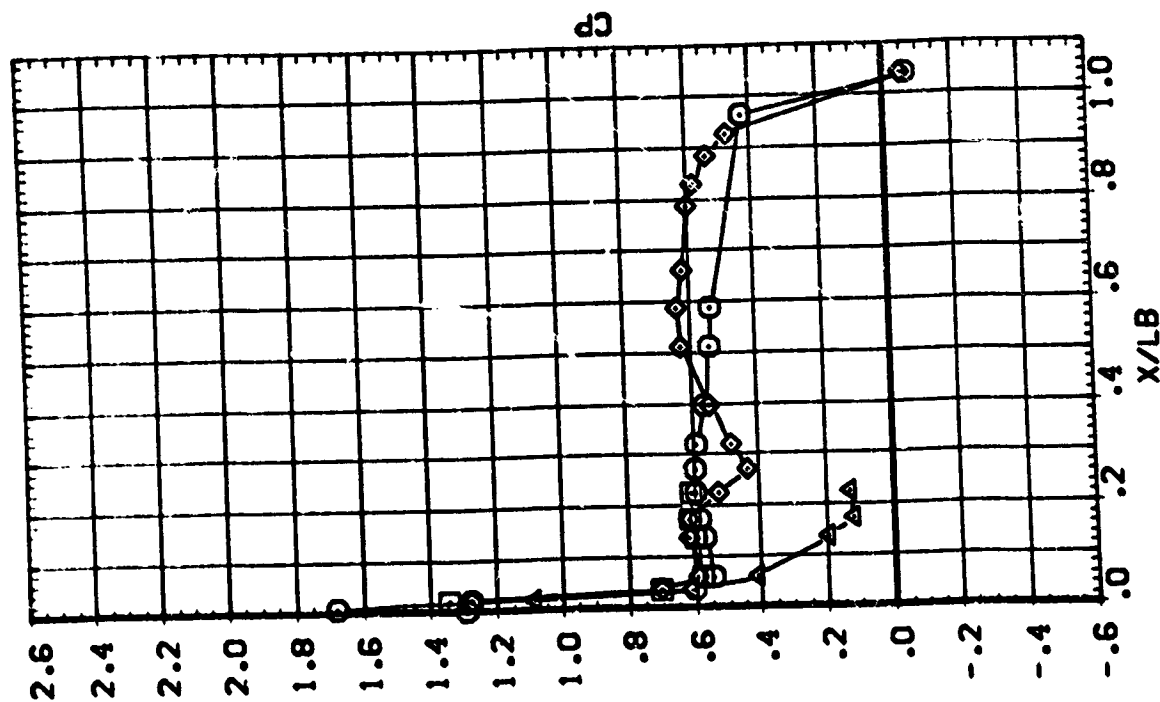
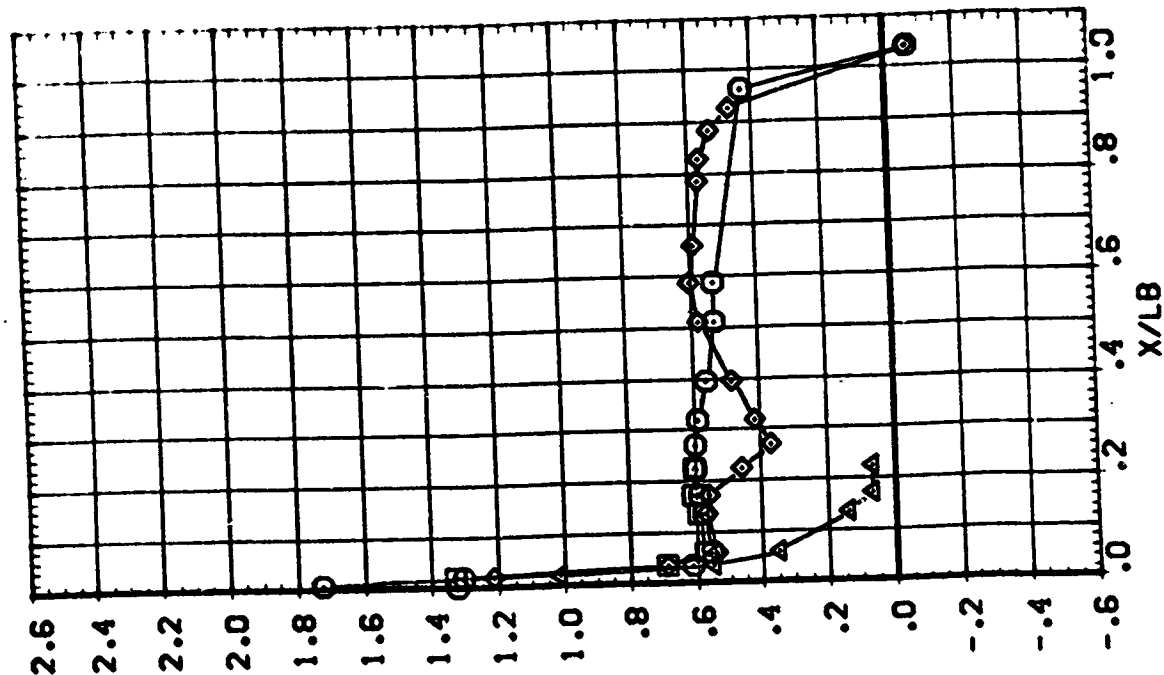
ORBITER FUSELAGE (RBQB18)

AVES 87-707 CA:2 02A

PARAMETRIC VALUES
30.000 RLODER .000
42.000 RLOFLR .000

BE'A 6.700
MAC 3.501

SYMB
O 70.000
◇ 42.000
△ 55.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RB0B13)

AVES 87-707 CA12 C2A

SYMBOL

70.000
90.000
120.000
135.000

BETA
-6.700
-3.420

MACH
3.501

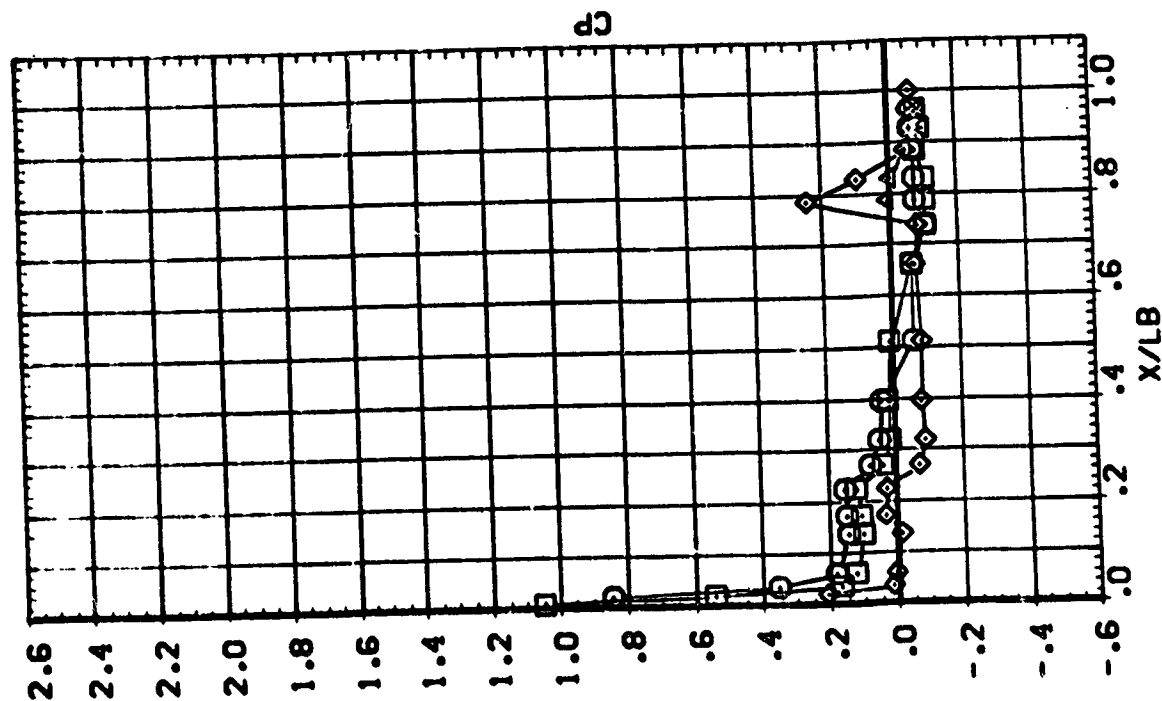
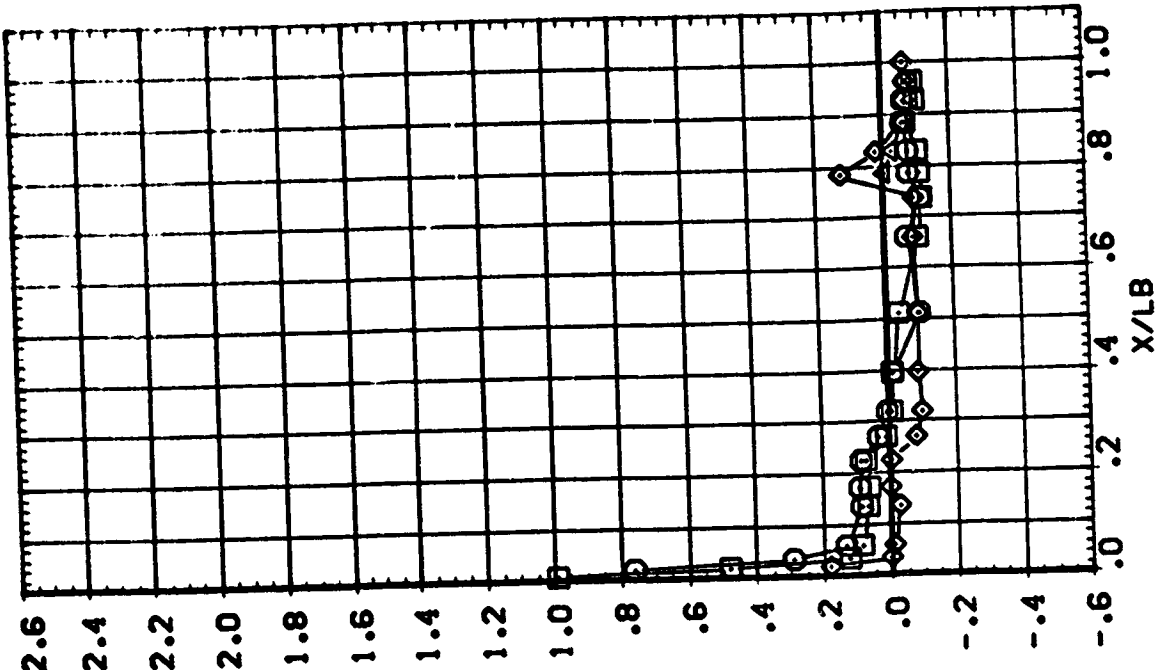
PARAMETRIC VALUES

ALPHA
ELEVON

30.000
.000

RJDR
RJDR

.000
40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBQB18)

AVES 87 707 CA:2 02A

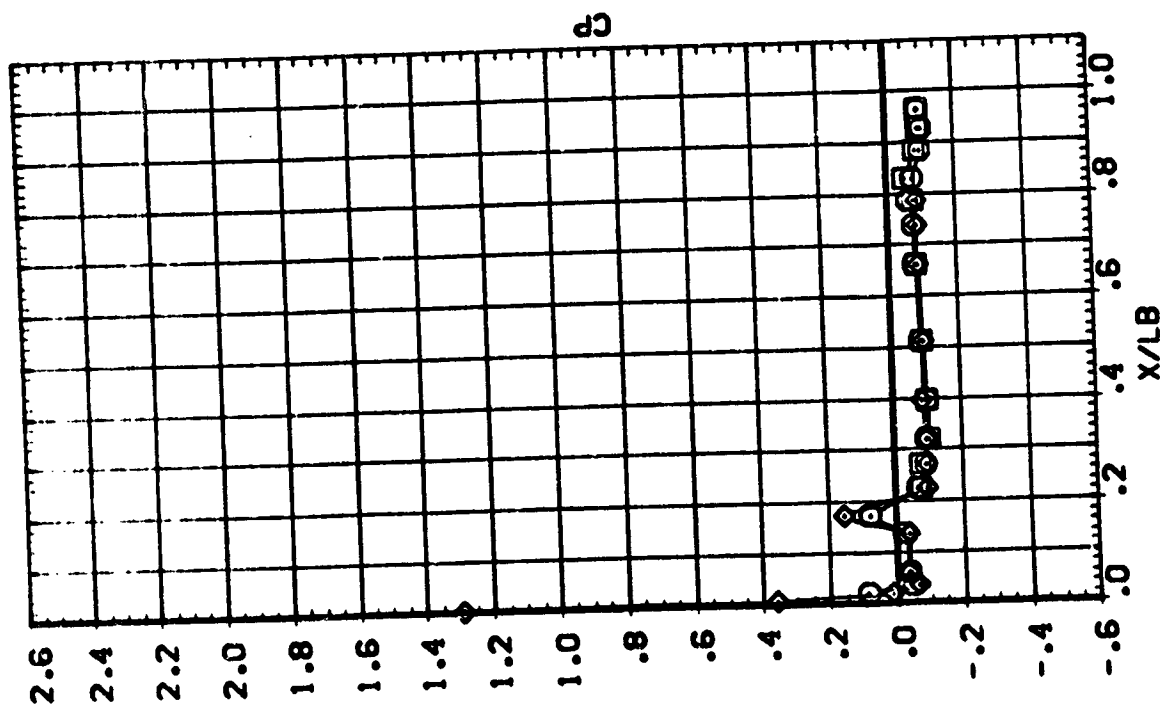
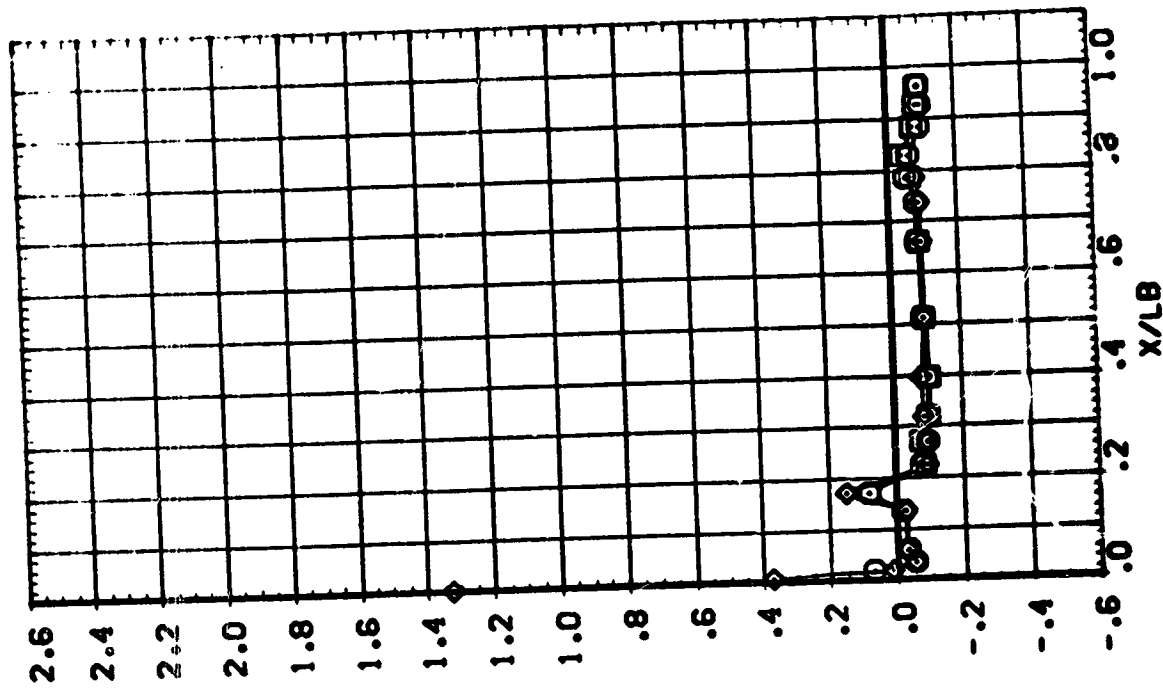
SYNCH
150.000
155.000
160.000

BE TA
-6.700
-3.470

MACH
3.50

ALPHA
ELEVON

PARAMETRIC VALUES
30.000
.000
40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES



ORBITER FUSELAGE (R80B18)

AVES 87-707 0A12 02A

SYMBOL
O
□
◇
△

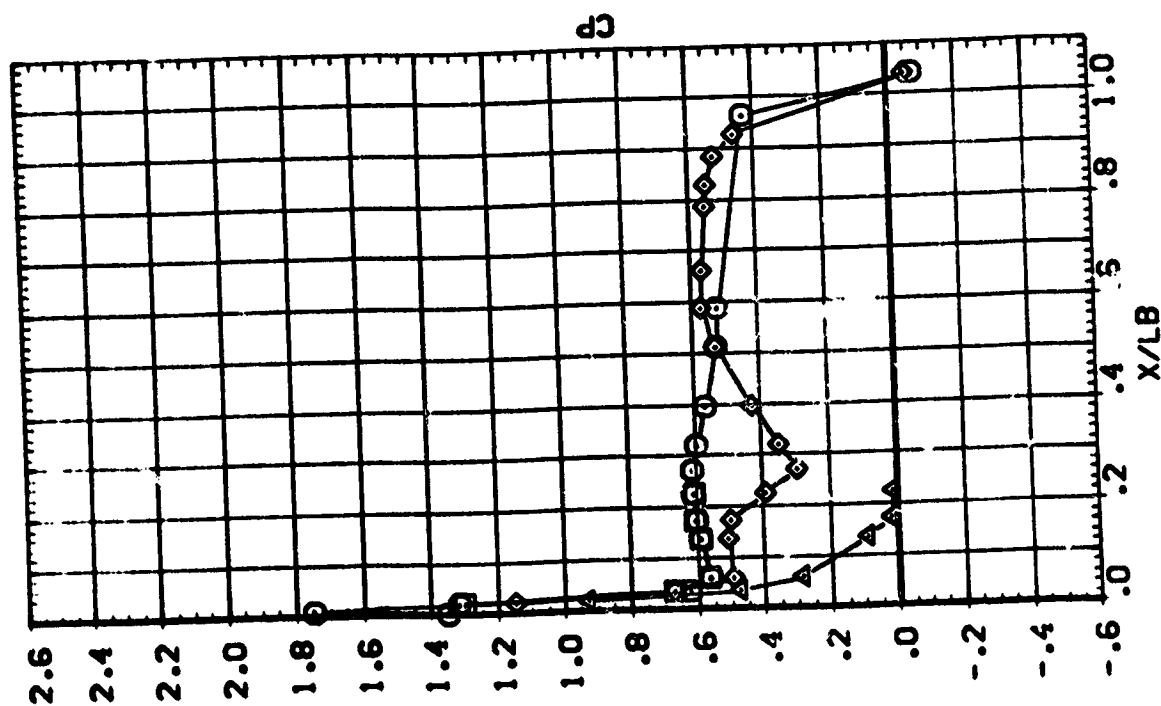
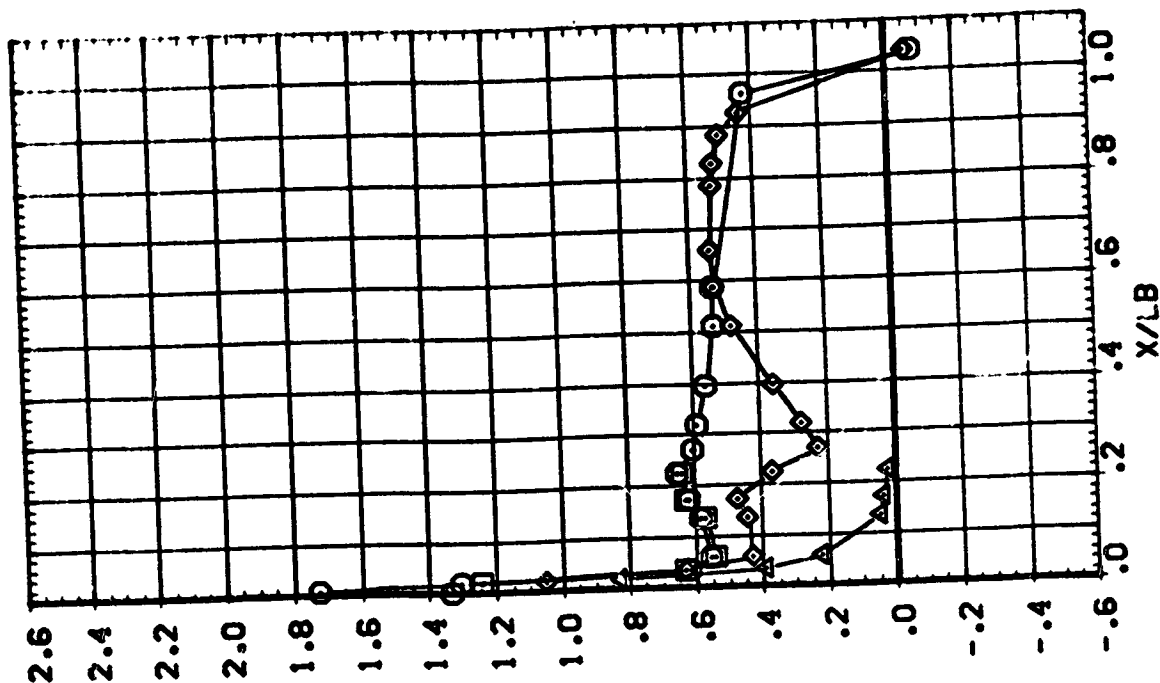
PHI .000
20.000
40.000
55.000

BETA :
-1.130
3.170

MACH
3.501

PARAMETRIC VALUES
30.000 RUDDER
.000 RUOTLR
40.000

ALPHA
ELEVON



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBGB18)

AVS 87 707 CA12 02A

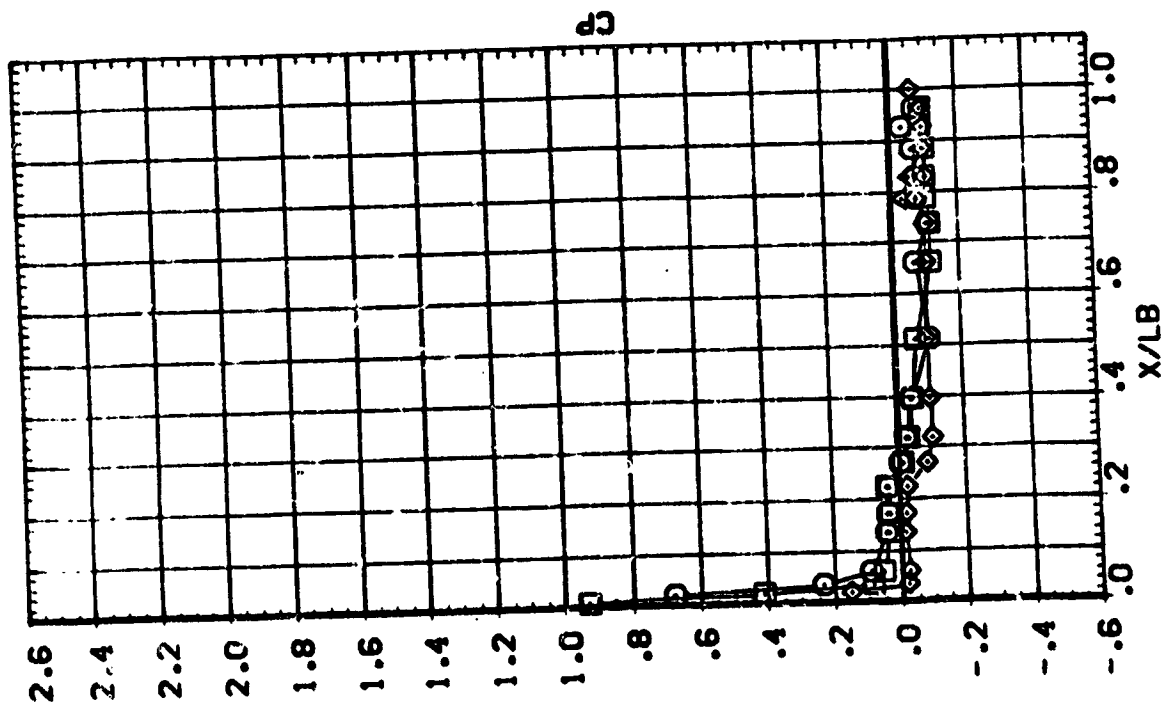
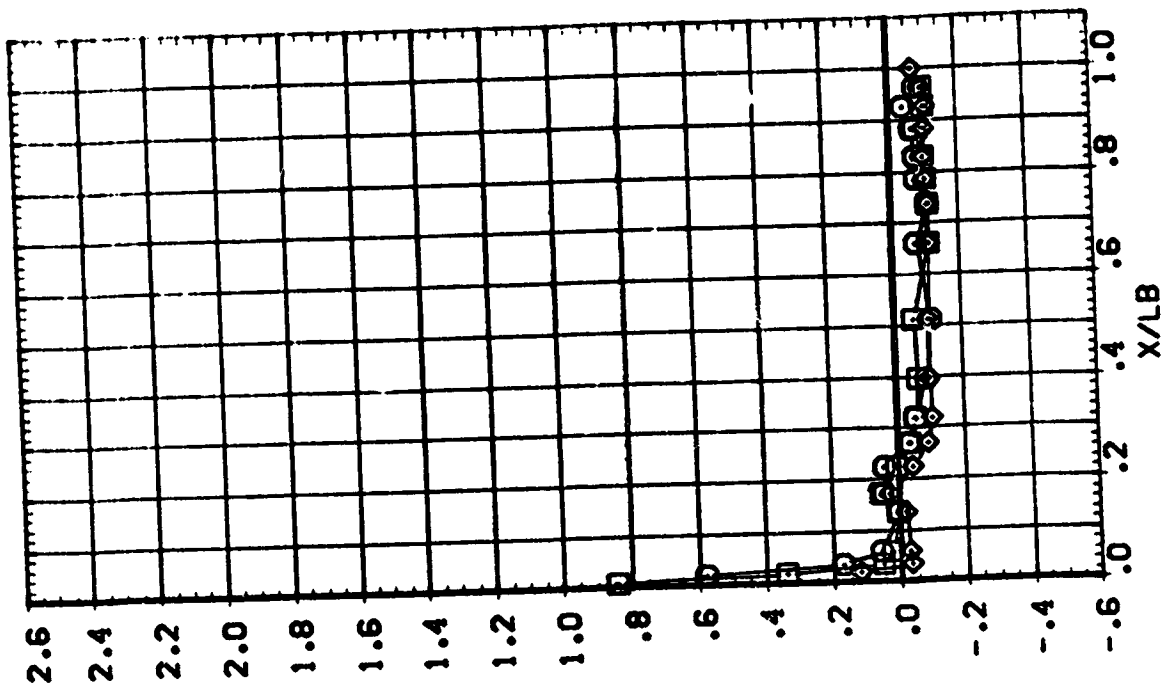
SYMBOL
 ○ ○ ○
 ◇
 △

QAL 70,000
 90,000
 100,000
 135,000

BE TA 1.30
 3.75

MACH 3.50

PARAMETRIC VALUES
 30,000 RUDER .000
 .000 RUDFLR 40,000
 ALPHA
 ELEVON



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES



ORBITER FUSELAGE (R90818)

AVES 87-707 3A12 C2A

SYMB: ○ ◇

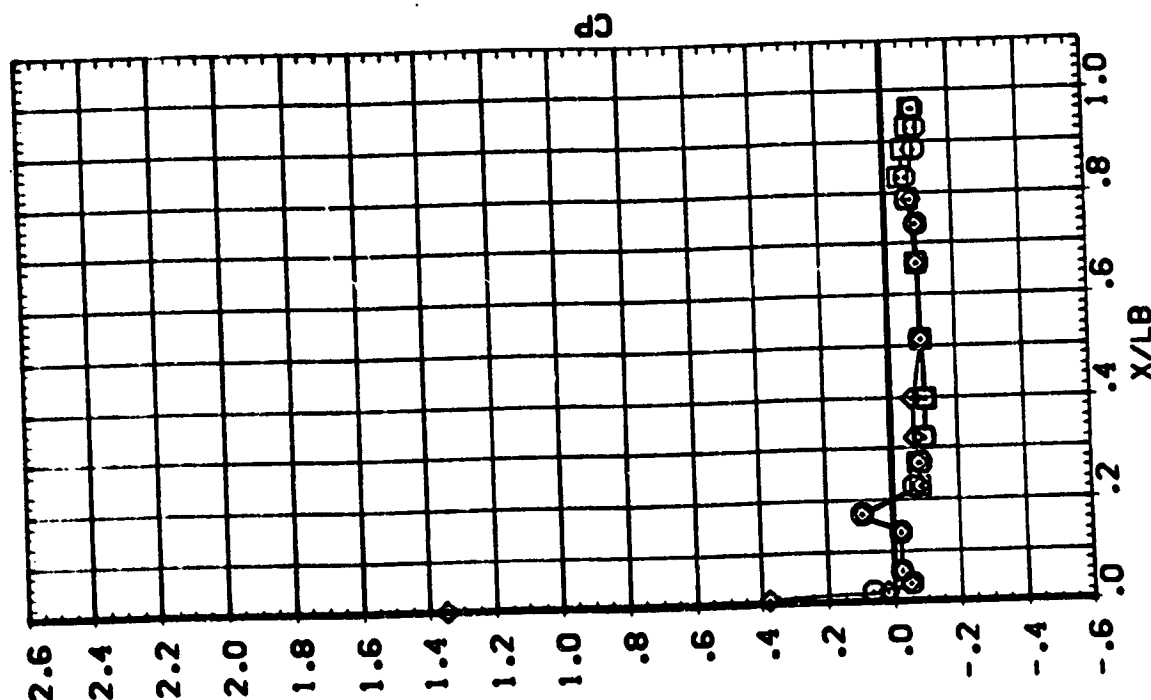
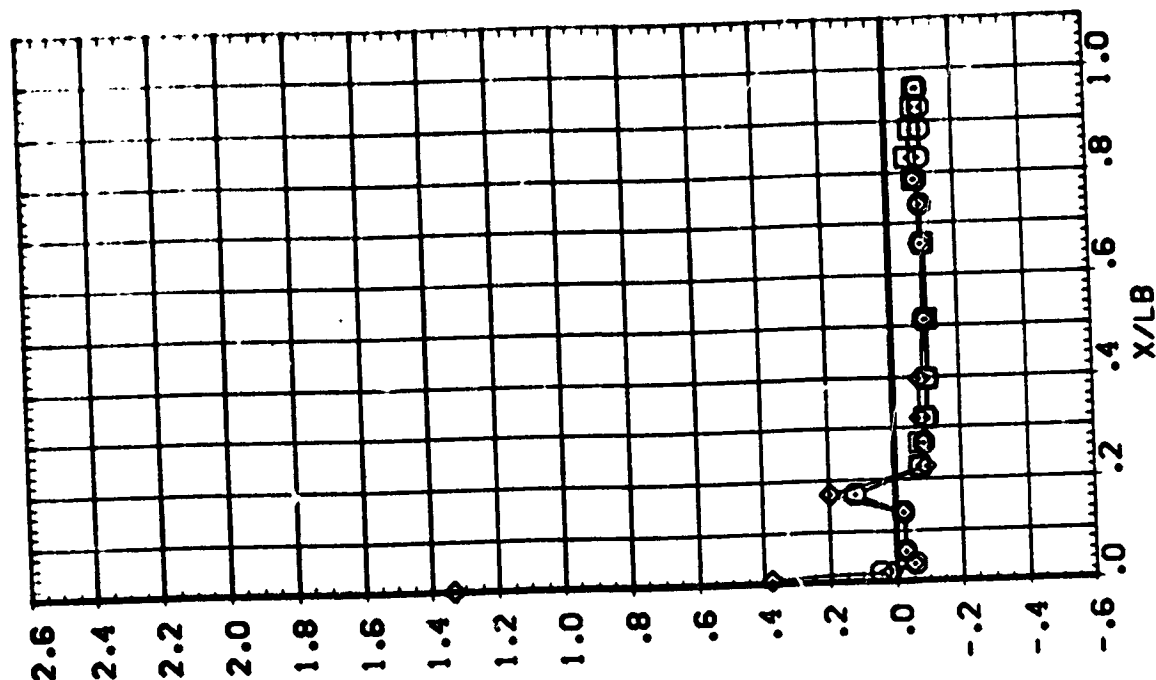
PH: 150.000
165.000
180.000

BE "A" 3.170

MACH 3.50:

PARAMETRIC VALUES

ALPHA ELEVON
30.000 .000
R.D.F. R
.000 45.000



ORBITER FUSELAGE (R803:8)

AVES 87-707 GA:2 02A

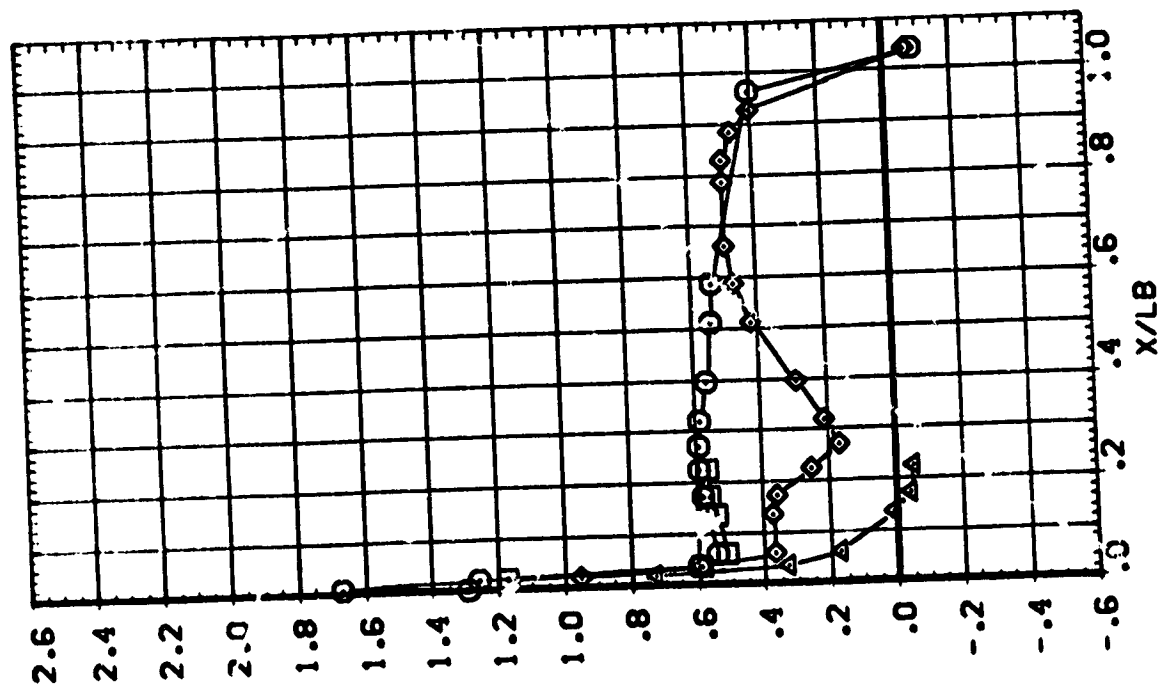
SYMBOL
O
◇
△

PM: .000
20.000
40.000
55.000

BE: A 6.470 MAC: 3.501

PARAMETRIC VALUES
30.000 R_ODER
.000 R_ODER
40.000

ALPHA
ELEVON



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

CRBITER FUSELAGE (RBQB18)

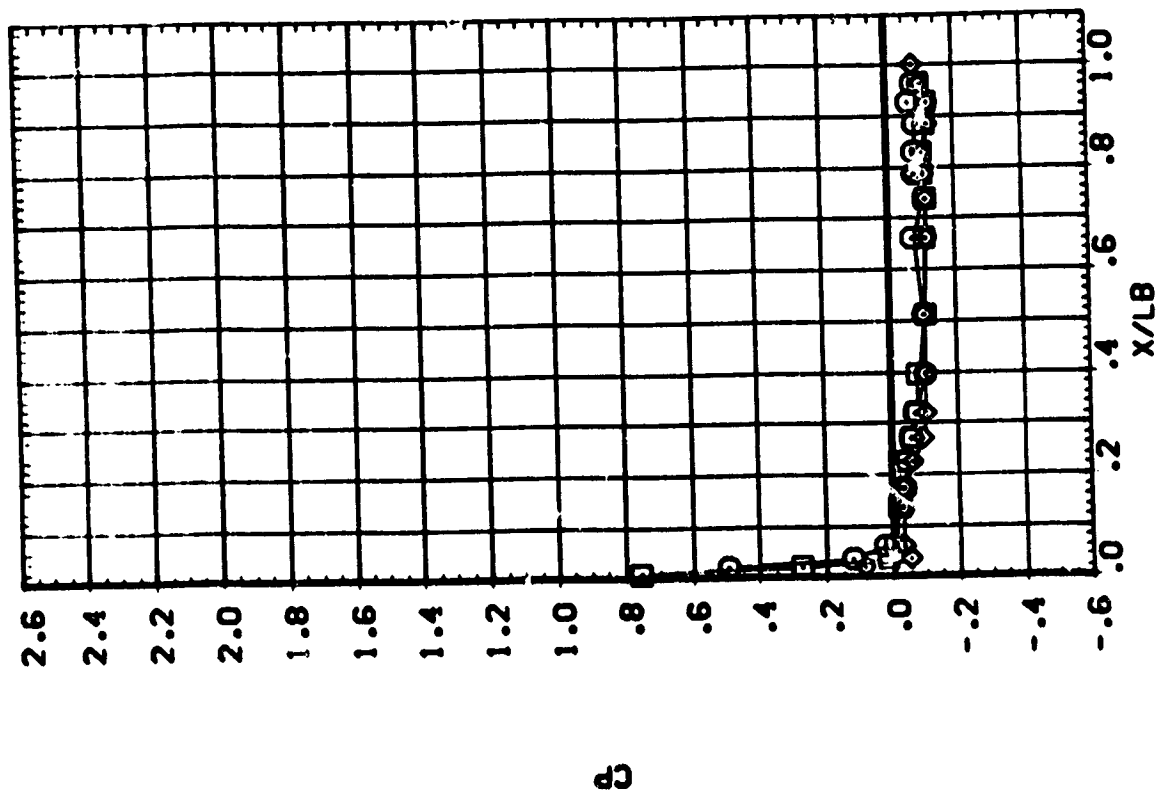
AVES 87-707 CA12 C2A

PARAMETRIC VALUES
 30,000 RJOER .000
 40,000 RJOER .000

ALPHA
 ELEVON

BE'A MACH
 6.470 3.501

SYMBOL
 70,000
 90,000
 120,000
 150,000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (R333:8)

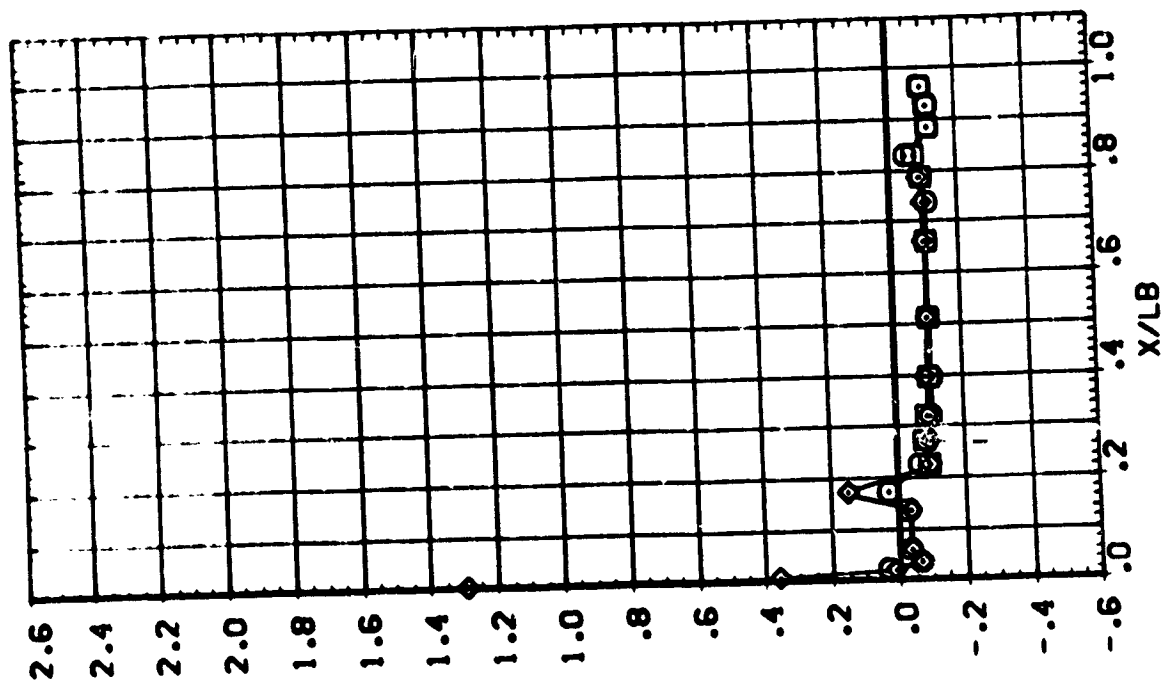
AVES 87-707 CA:2 C2A

PARAME:1012 1A.15
30.000 0.000 0.000
0.000 0.000 0.000

BE:1 6.47C 3.501

5-1000
150.000
150.000
150.000

ALPHA
ELEVON



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RB0908)

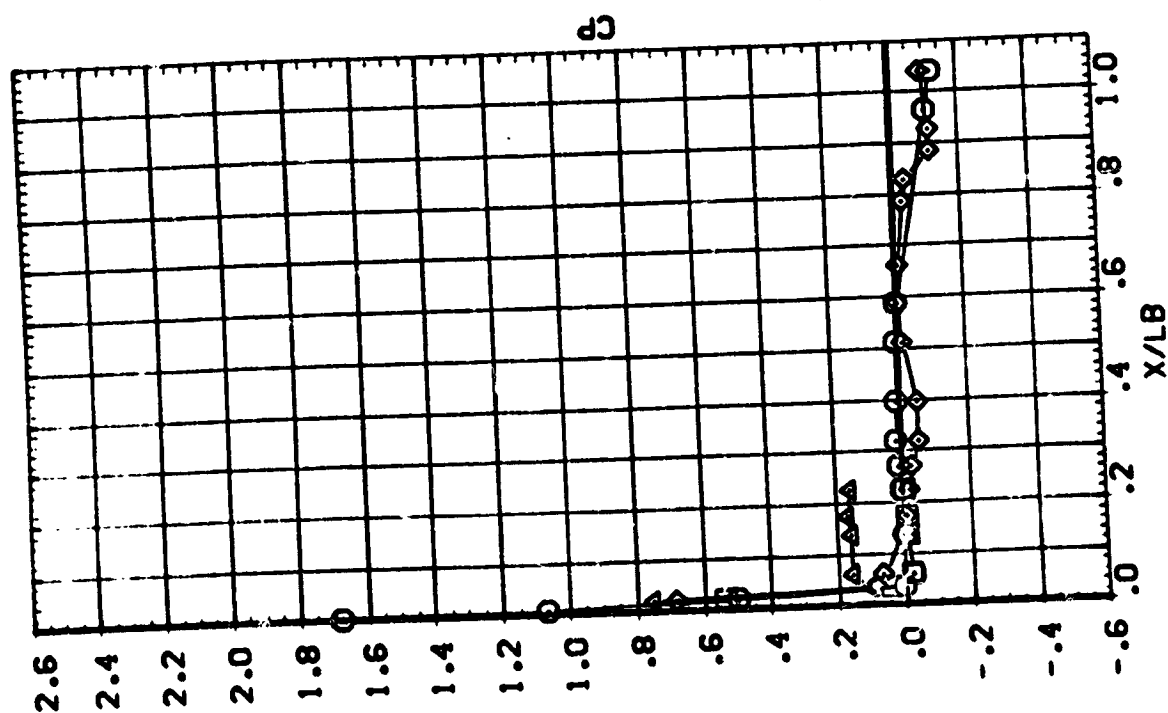
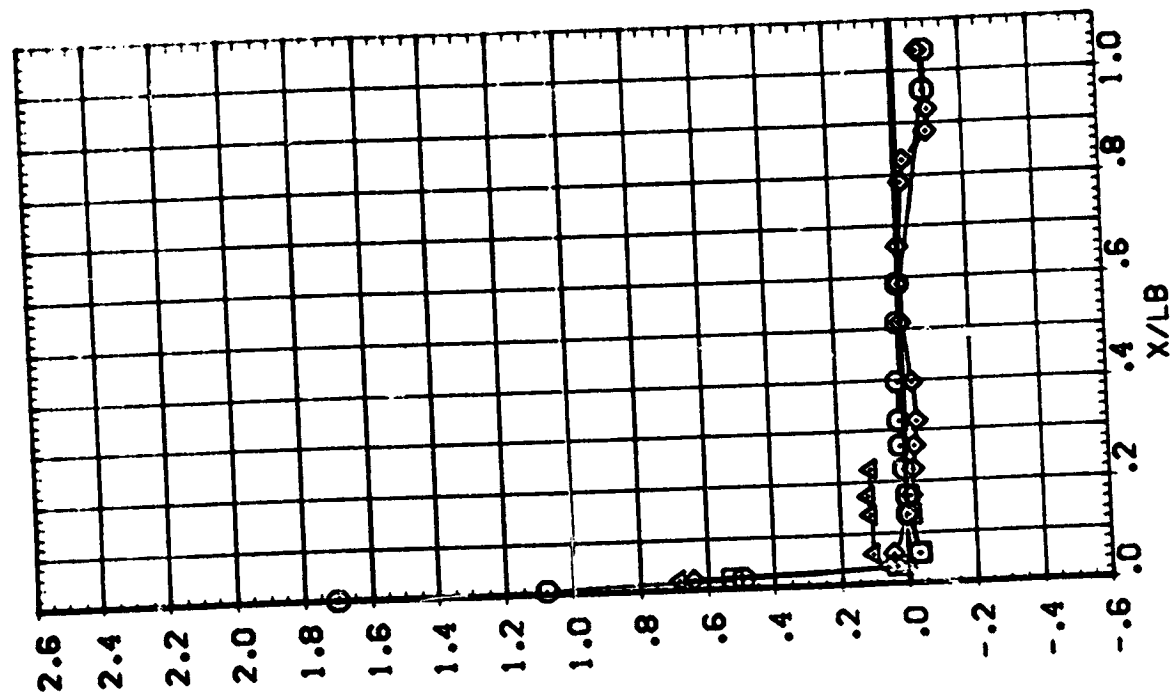
AVES 87-707 CA12 02A

PM: .000
70.000
40.000
55.000

BE-A -6.440
-3.300

MACH 2.498

PARAMETRIC VALUES
ALPHA .000
ELEVON 10.000
RUDDER .000
RDFLR 40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (R8C8C8)

AVES 87-707 3A12 02A

SYMBOL
()
◇
△

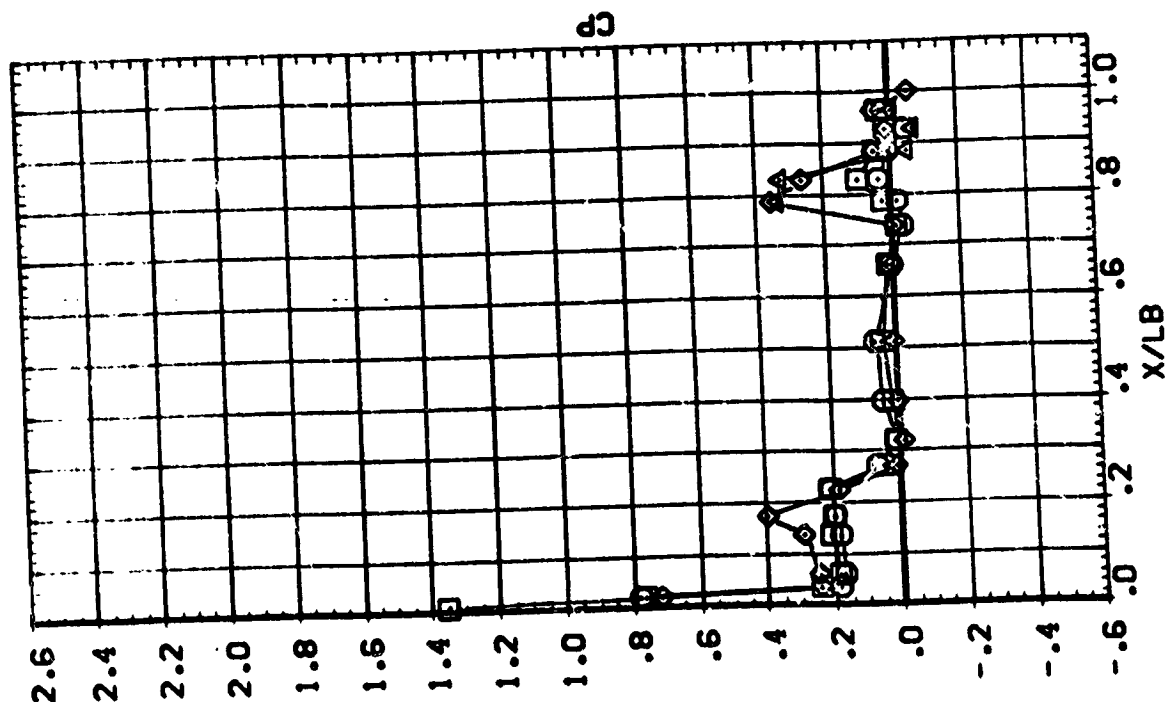
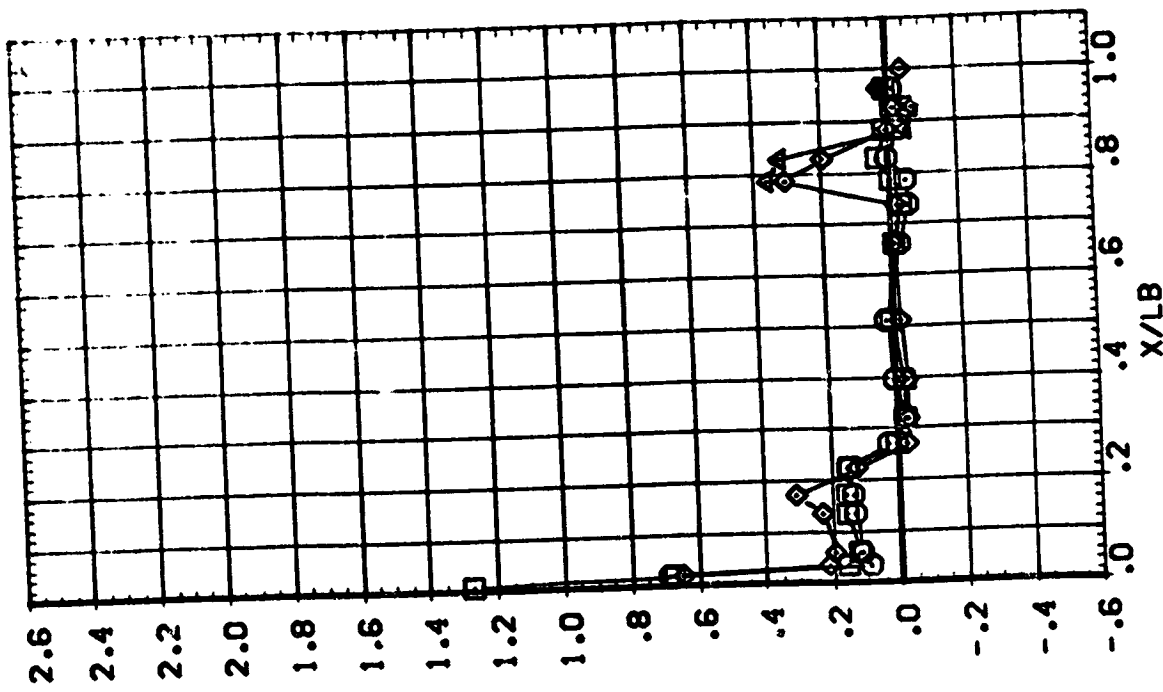
MAC
70.000
90.000
170.000
350.000

BE'A
6.440
3.300

MAC
7.498

PARAMETRIC VALUES
ALPHA
ELEVON
RUDER
RUDFLR

.000
10.000
40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES



ORBITER FUSELAGE (R8C808)

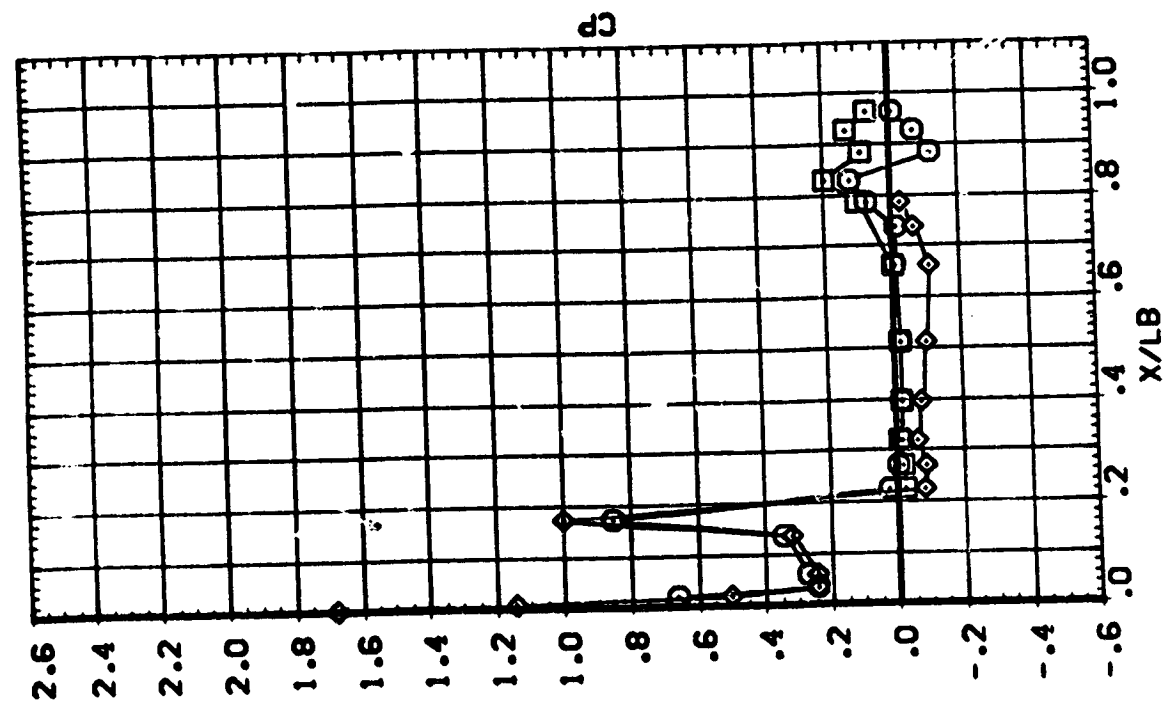
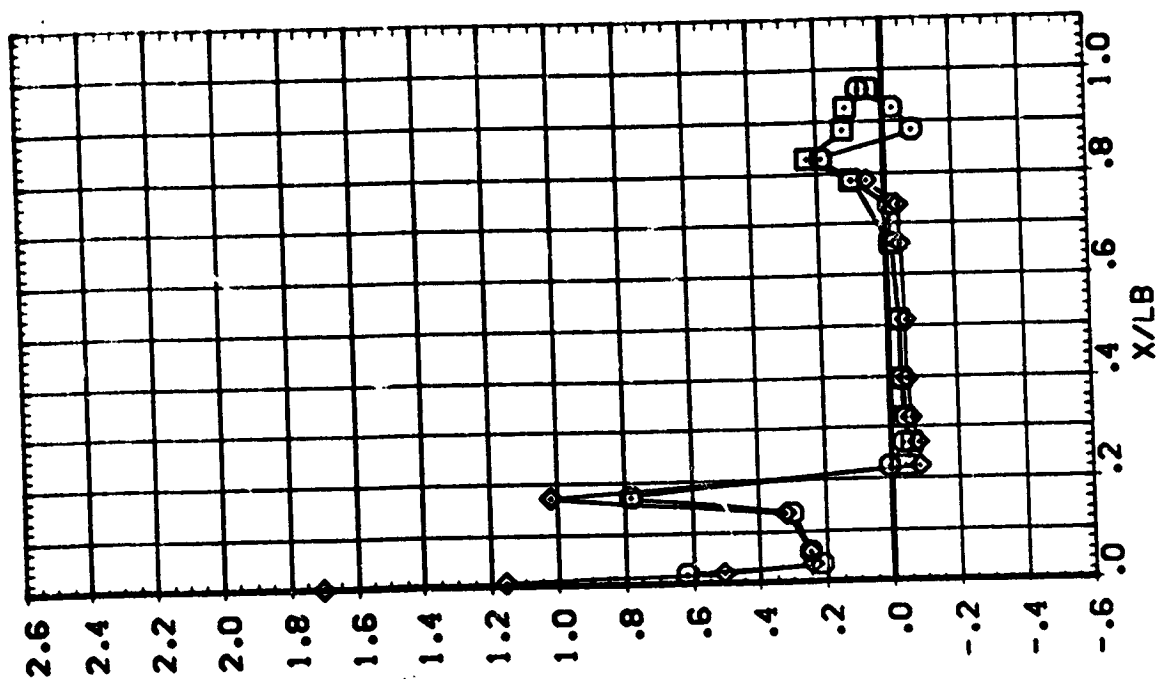
AVES 87-707 3A:2 32A

SYMBOL
P1
150.000
165.000
180.000

BETA
-6.440
-3.300

MACH
2.498

PARAMETRIC VALUES
ALPHA
ELEVON
10.000
RUDER
RUDFLR
40.000
40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBQB08)

AVES 87-707 CA12 02A

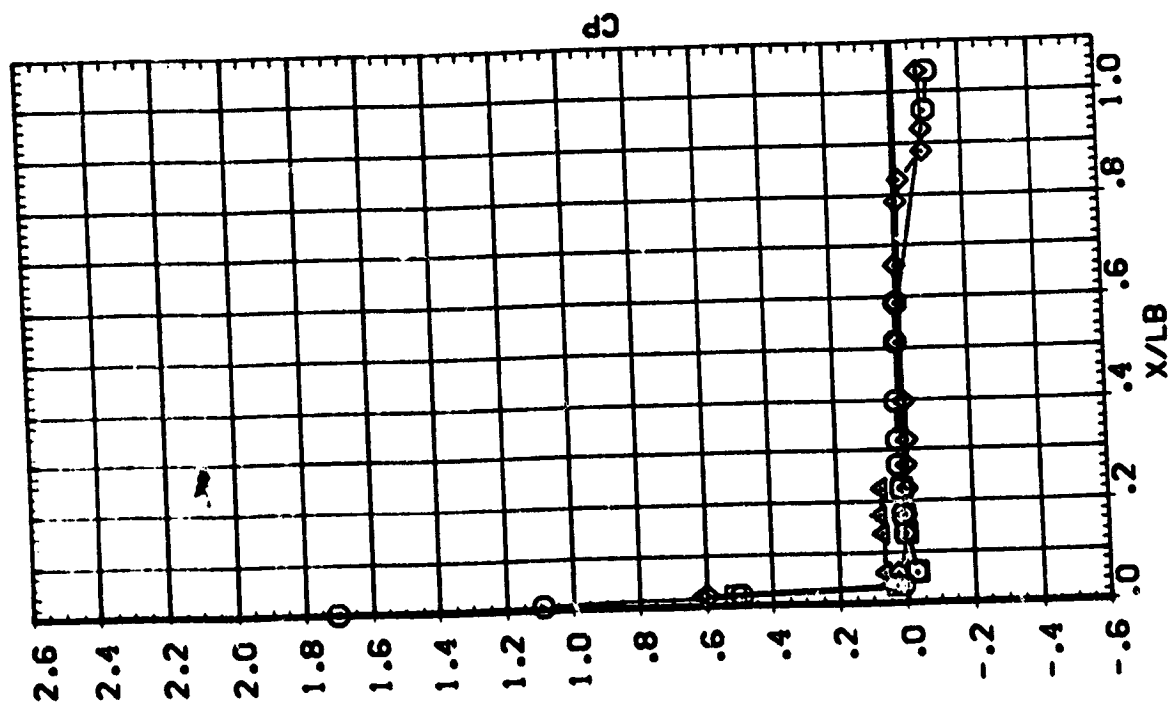
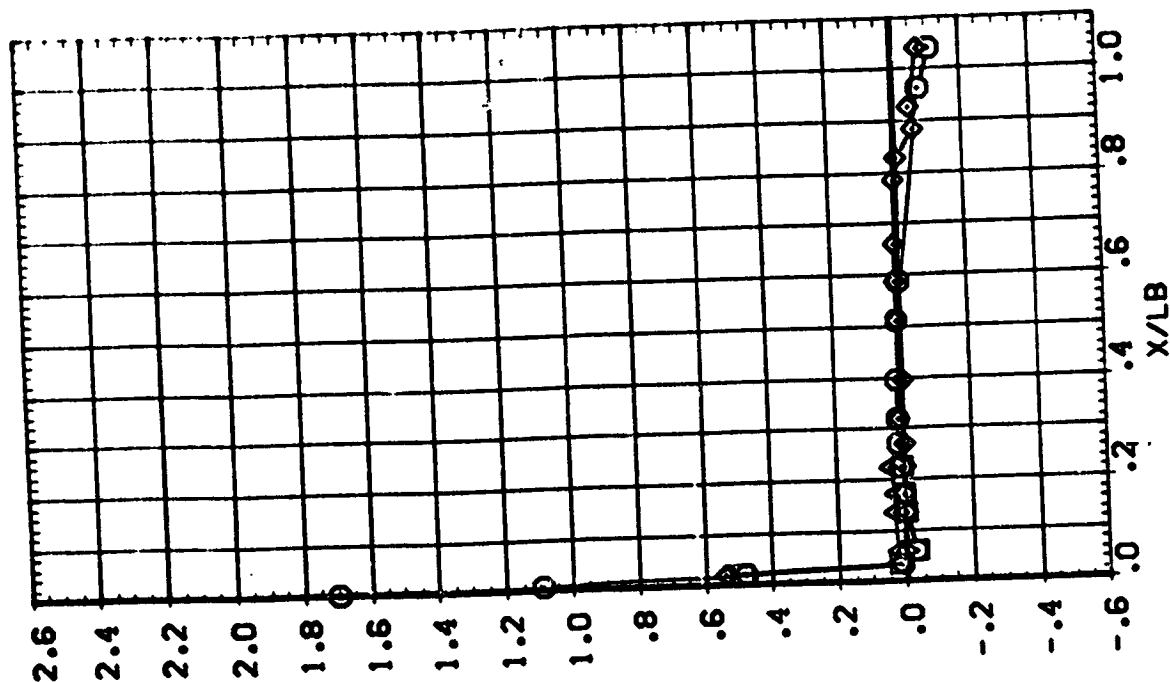
SYMBOL
 ○ □ ◇ △

PHI .000
 20.000
 40.000
 55.000

BETA .160
 3.060

MACH 2.498

PARAMETRIC VALUES
 ALPHA .000
 ELEVON 10.000
 RUDDER .000
 RUFLR 40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES



ORBITER FUSELAGE (RBQB08)

AVES 87-7C7 CA12 02A

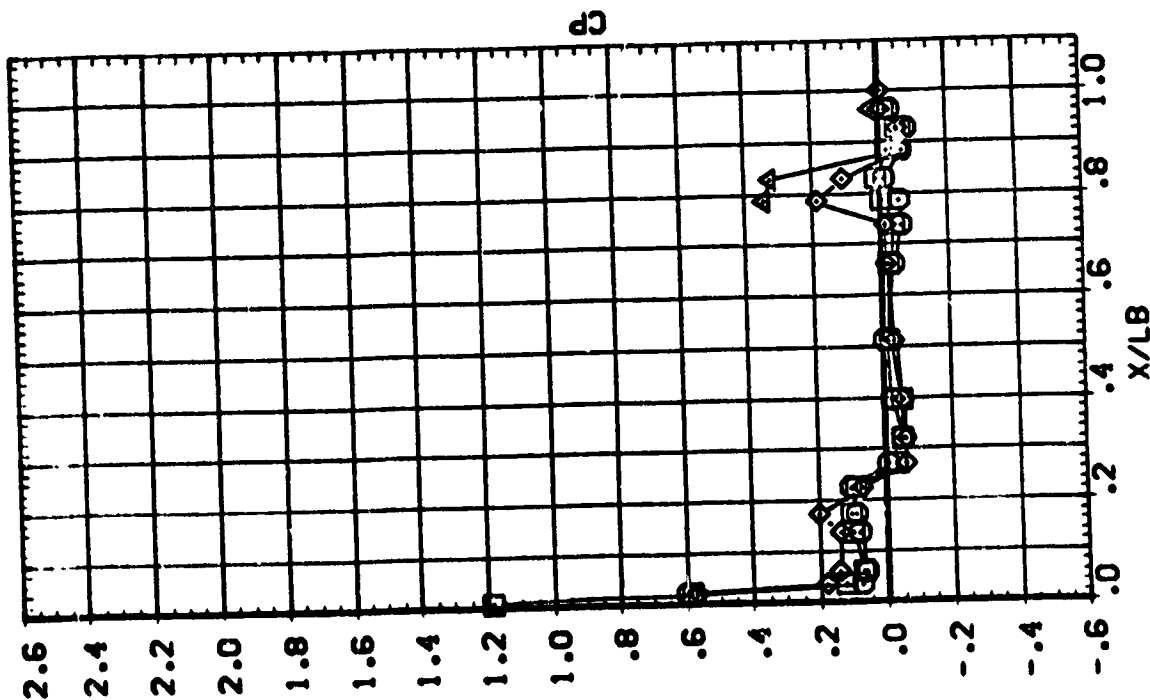
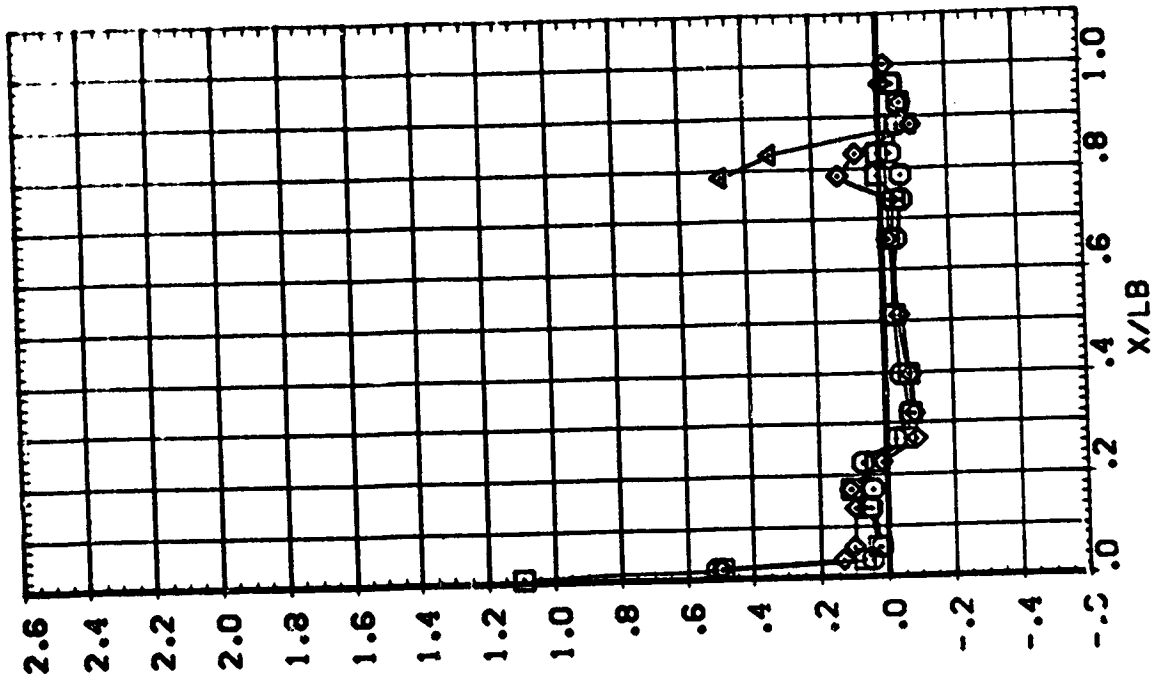
SYMBOL
□
◇
△

PMI 70.000
90.000
120.000
135.000

BETA
-1.160
3.560

MACH
2.498

PARAMETRIC VALUES
ALPHA
ELEVON
10.000
RJOFLR
40.000
RJOER
40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBQ908)

AMES 87-707 CA:2 02A

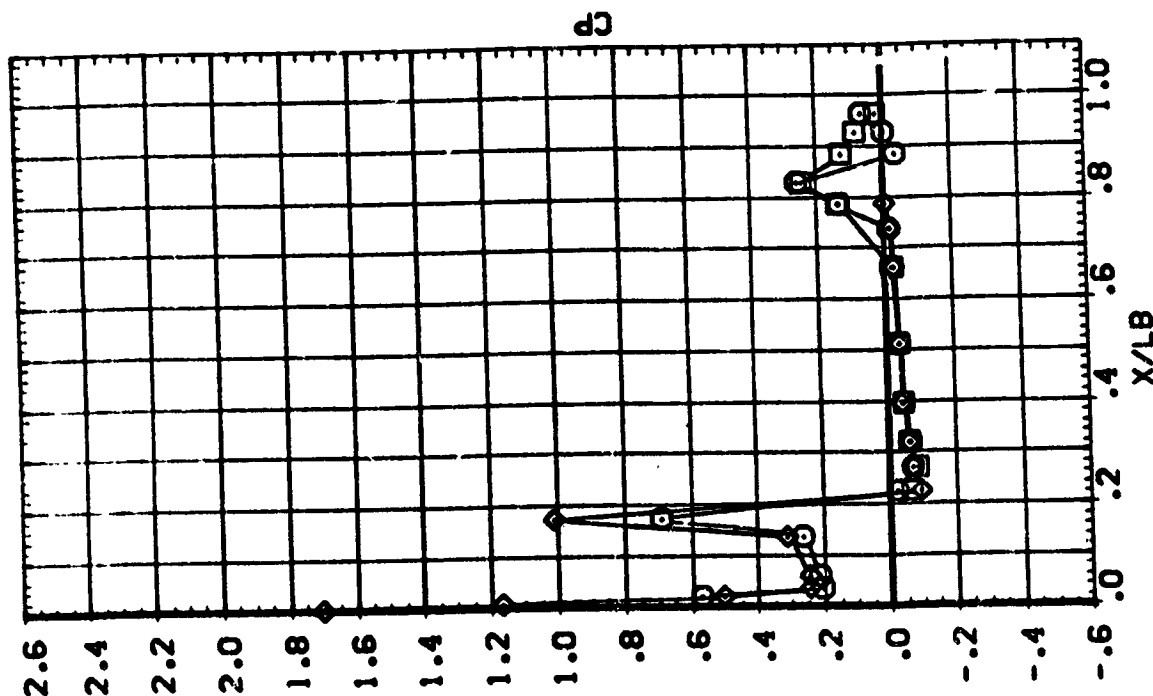
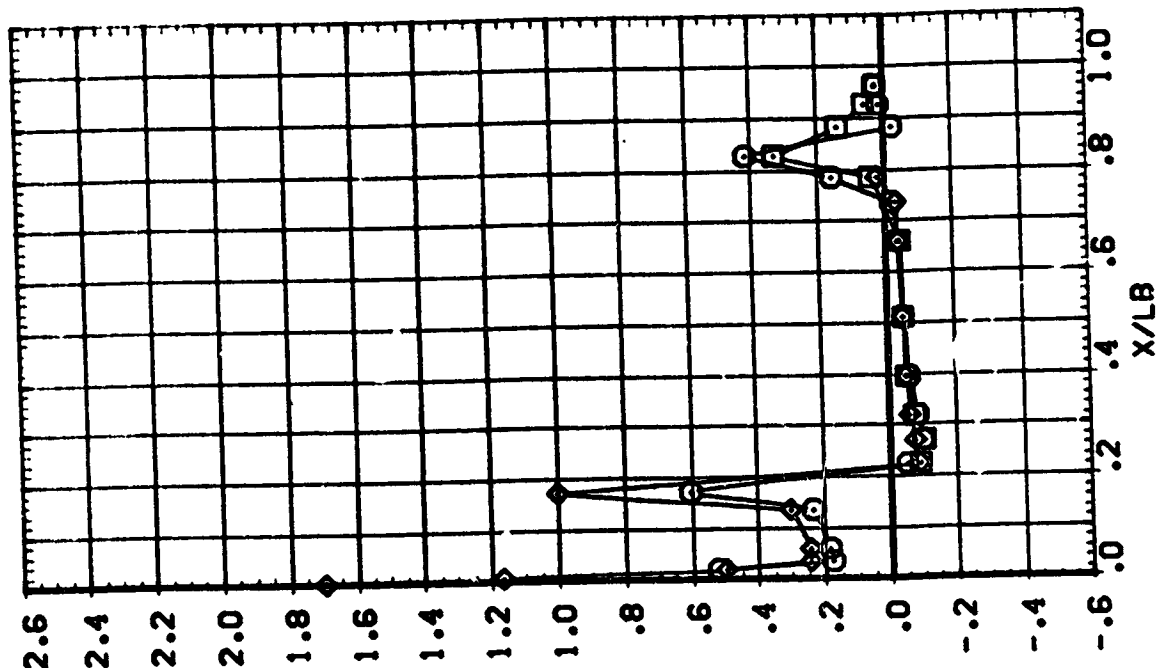
SYMBOL
 ○
 □
 ◇

PAI 150.000
 165.000
 180.000

BE'A -.16C
 3.56C

MACH 2.498

PARAMETRIC VALUES
 .000 .000 .000
 ALPHA R/OOER R/OOER
 ELEVON 10.000 40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (R80308)

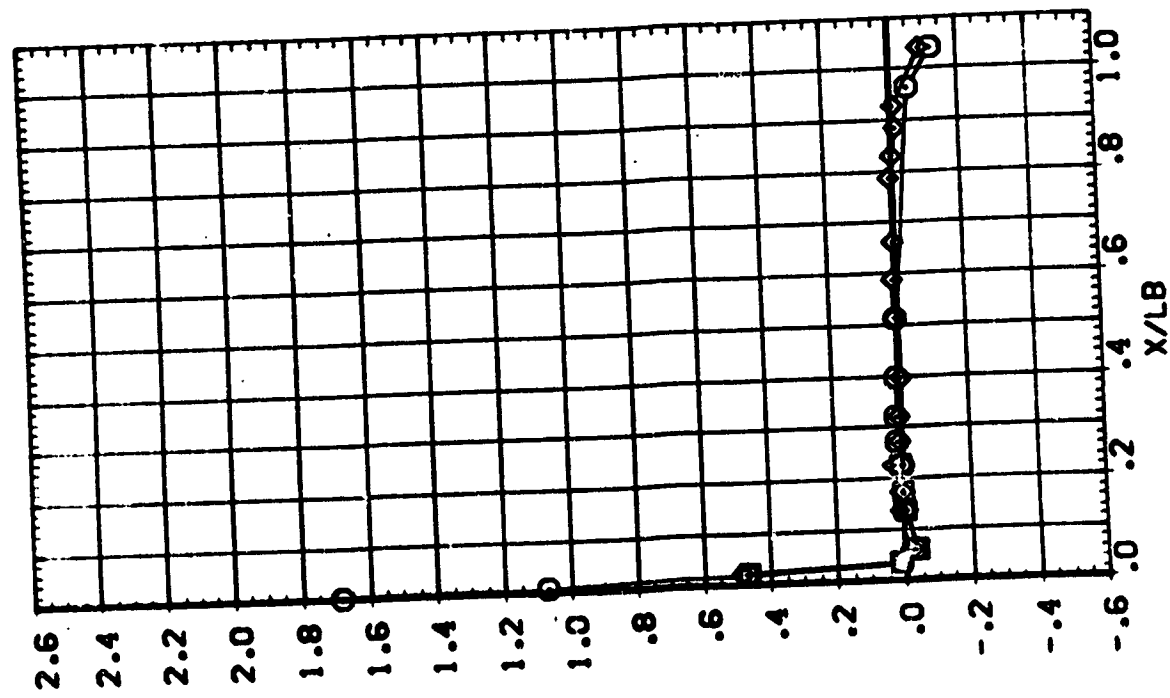
AVES 87-707 CA12 02A

SYMBOL
 .000
 70.000
 40.000
 55.000

BETA 6.790 MACH 2.498

PARAMETRIC VALUES
 .000 RJOER .000
 10.000 RJOFLR 40.000

ALPHA
 ELEVON



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE

ORBITER FUSELAGE

AVES 87-707 0A12 C2A

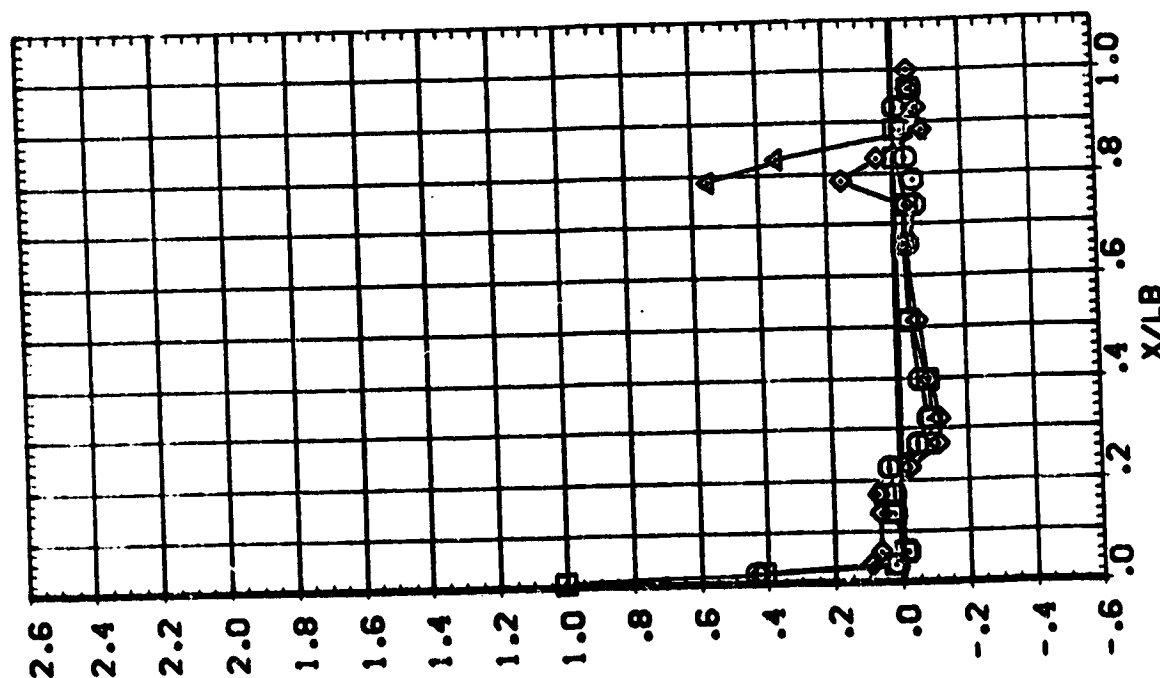
SYMBOL
□
◇
△

PAI 70.000
90.000
120.000
135.000

BETA 6.290
MACH 2.498

PARAMETRIC VALUES
.000
10.000
RUDER
RUDFLR
.000
40.000

ALPHA
ELEVON



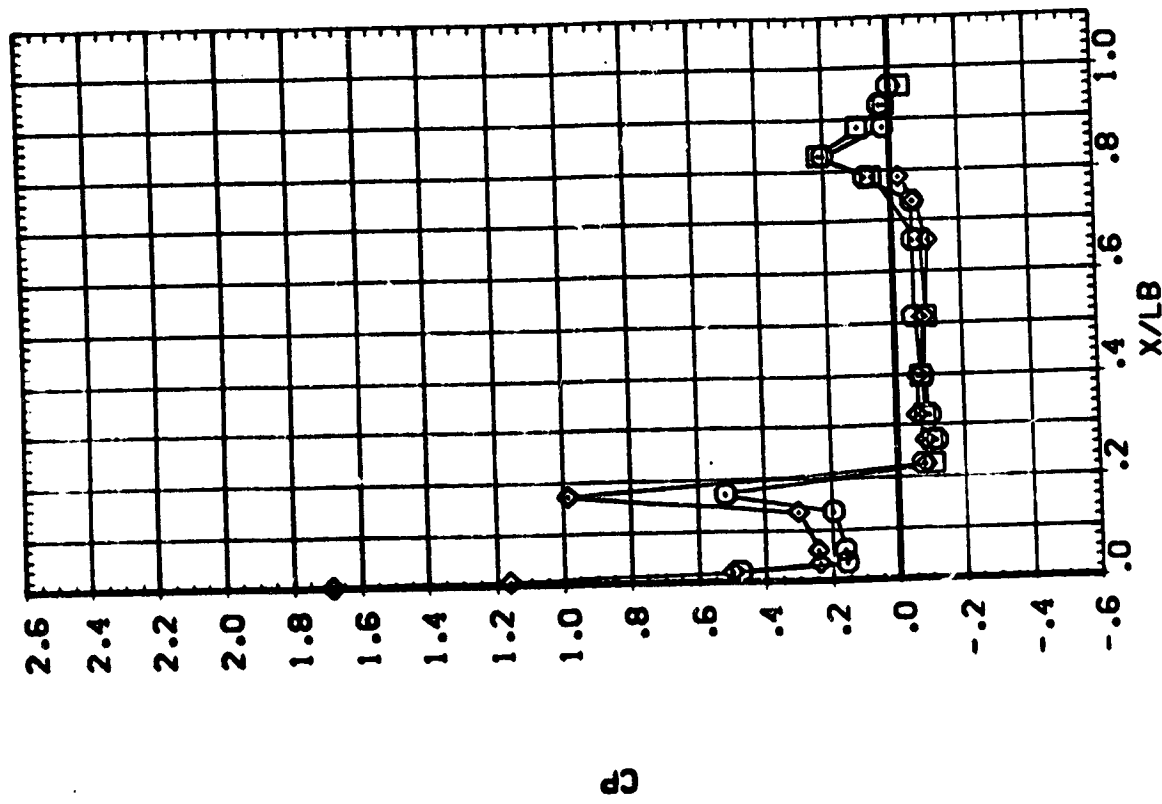
LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBQB08)

AVES 87-707 0A12 02A

PWT 150.000
 165.000
 180.000
 BETA 6.25C
 MACH 2.498

PARAMETRIC VALUES
 .000 RLODER
 10.000 RLOFLR
 .000
 40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBGB08)

AMES 87-707 3A:2 321

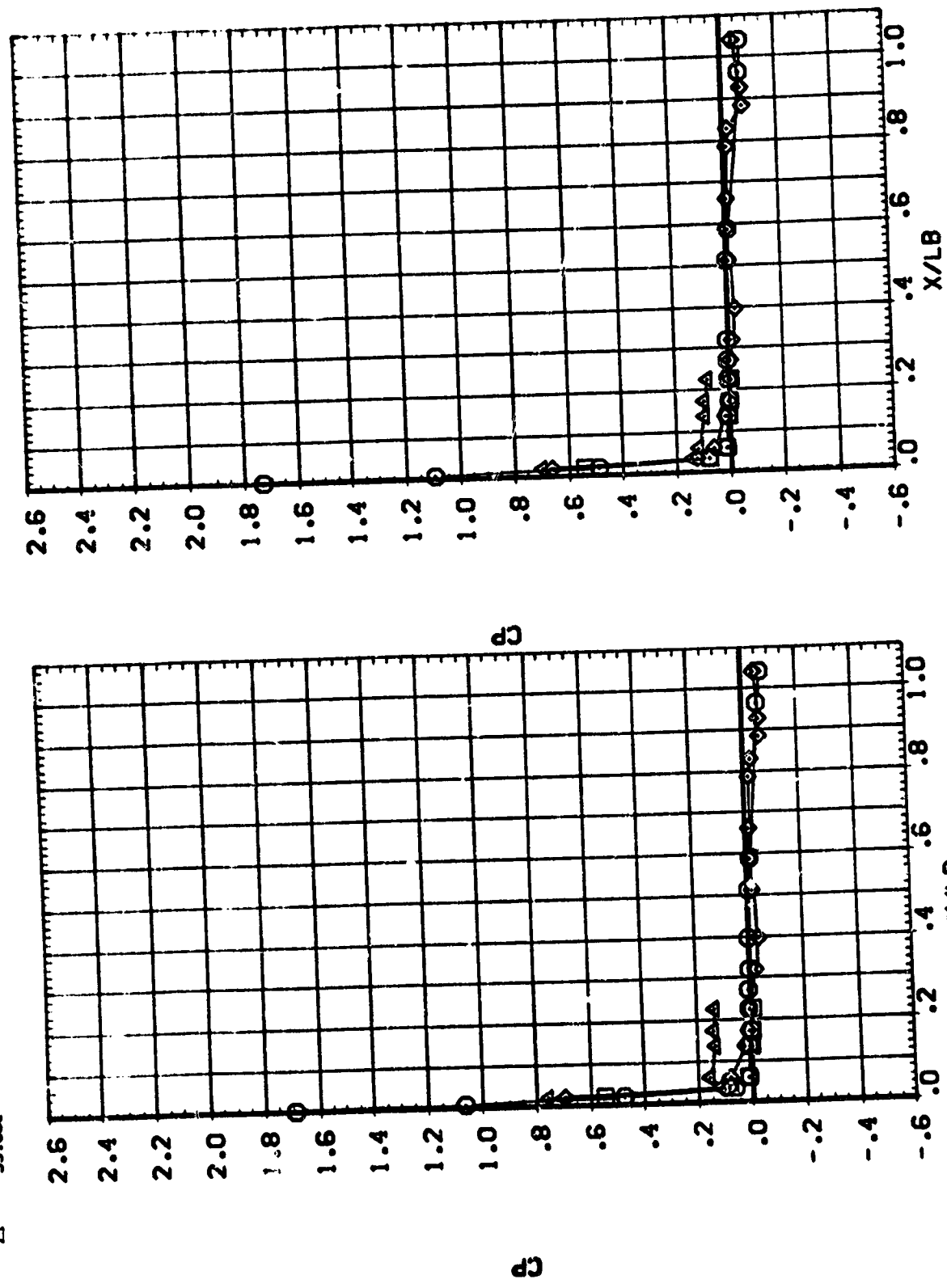
SYMBOL
 ○ ○ ○ ○
 △

PM: .000
 20.000
 40.000
 55.000

BETA
 -6.670
 -3.420

MACH
 3.501

PARAMETRIC VALUES
 .000 .000 .000
 10.000 10.000 10.000
 R/D/LR R/D/LR R/D/LR



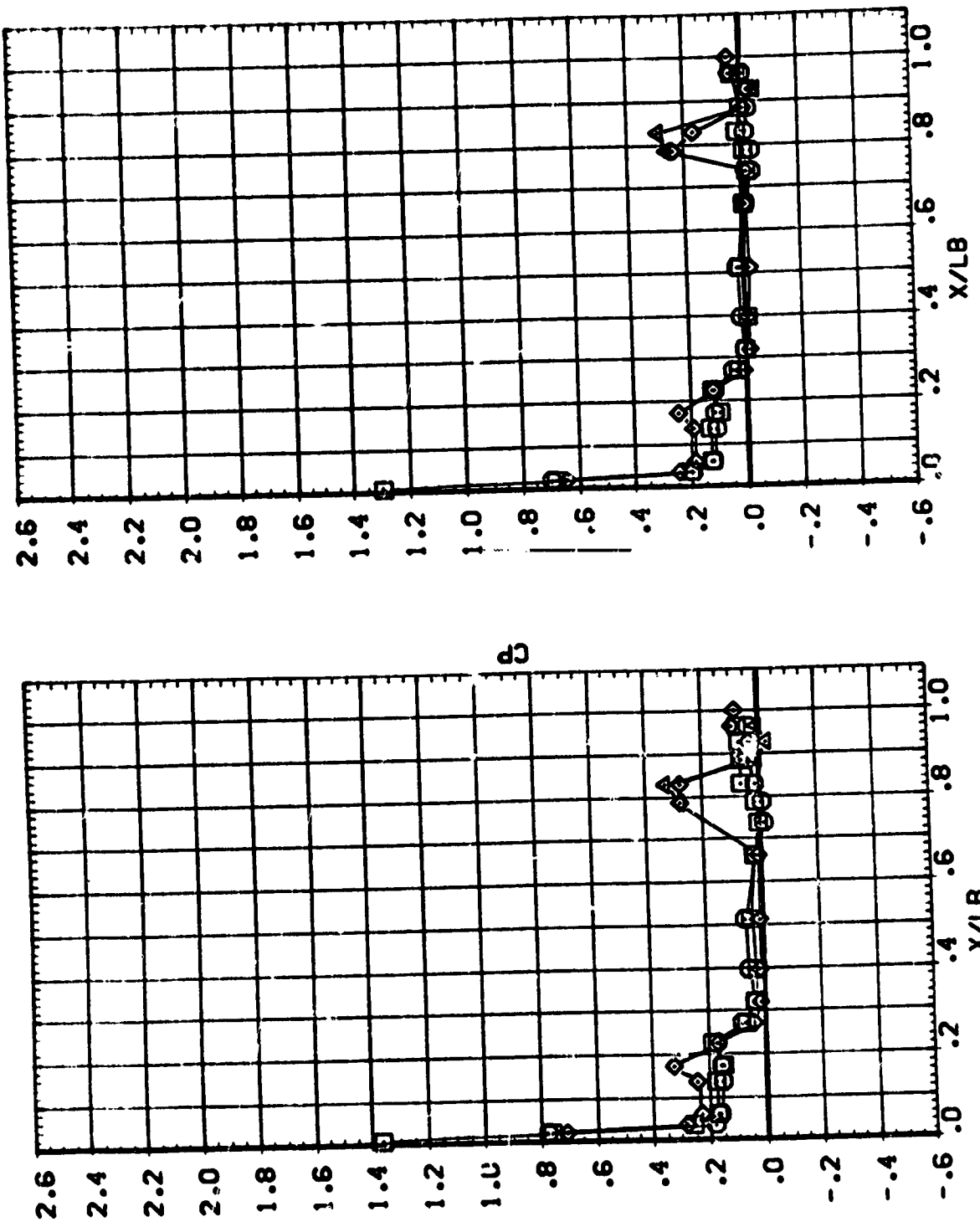
LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RB33C8)

AMES 87-707 0A12 02A

PWT 70.000
 BETA -6.670
 MACH 3.50
 90.223
 170.000
 135.000

PARAMETRIC VALUES
 ALPHA .000
 ELEVON 10.000
 RUDLER .000
 RUDLER 40.000



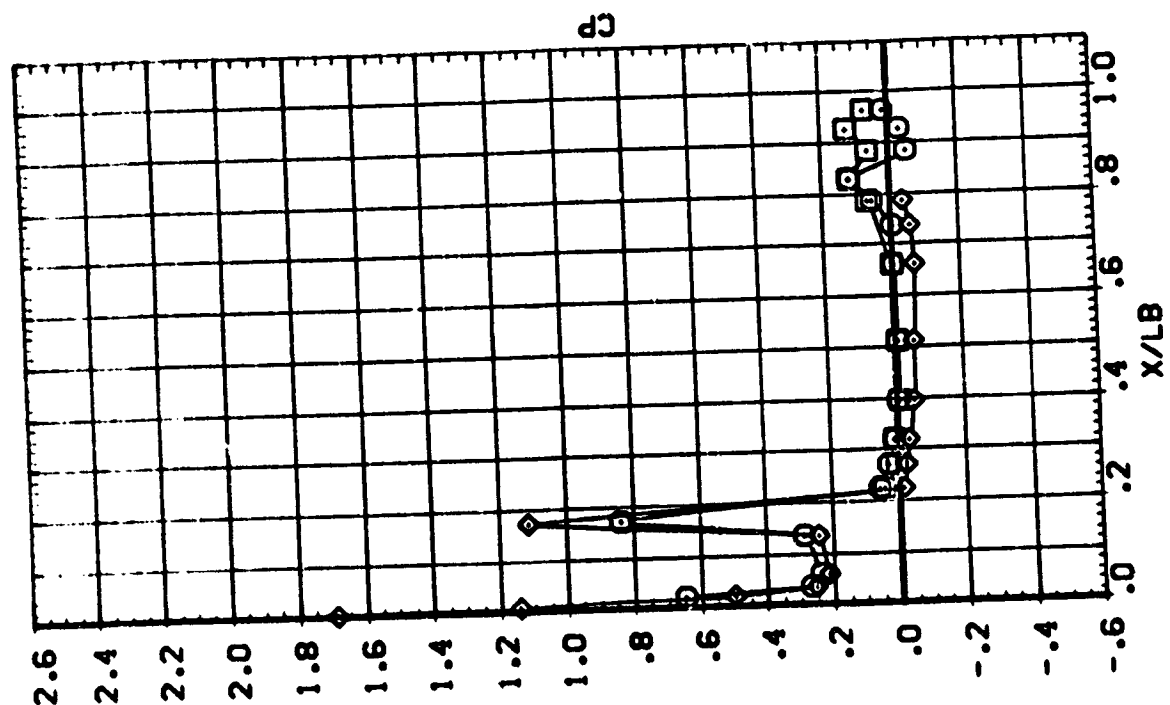
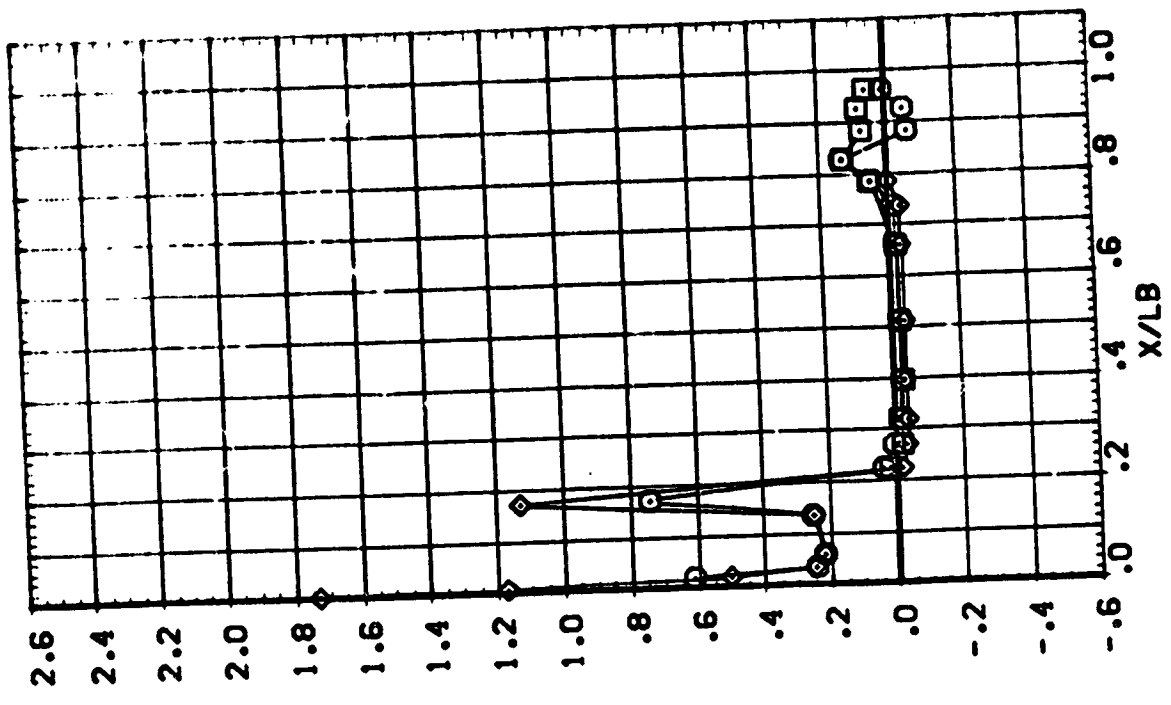
LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBCHUB)

SYMBOL
 O
 □
 ◇

ALPHA
 ELEVON
 0.000
 0.000
 0.000

PARAMETRIC VALUES
 0.000
 0.000
 0.000
 40.000



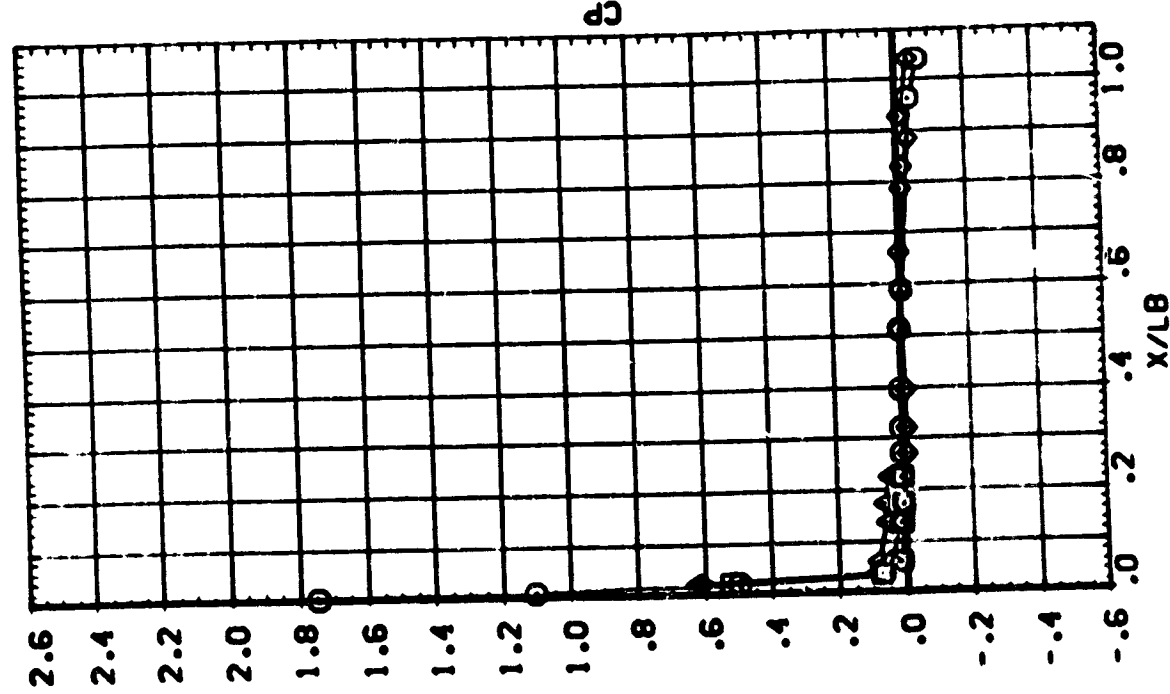
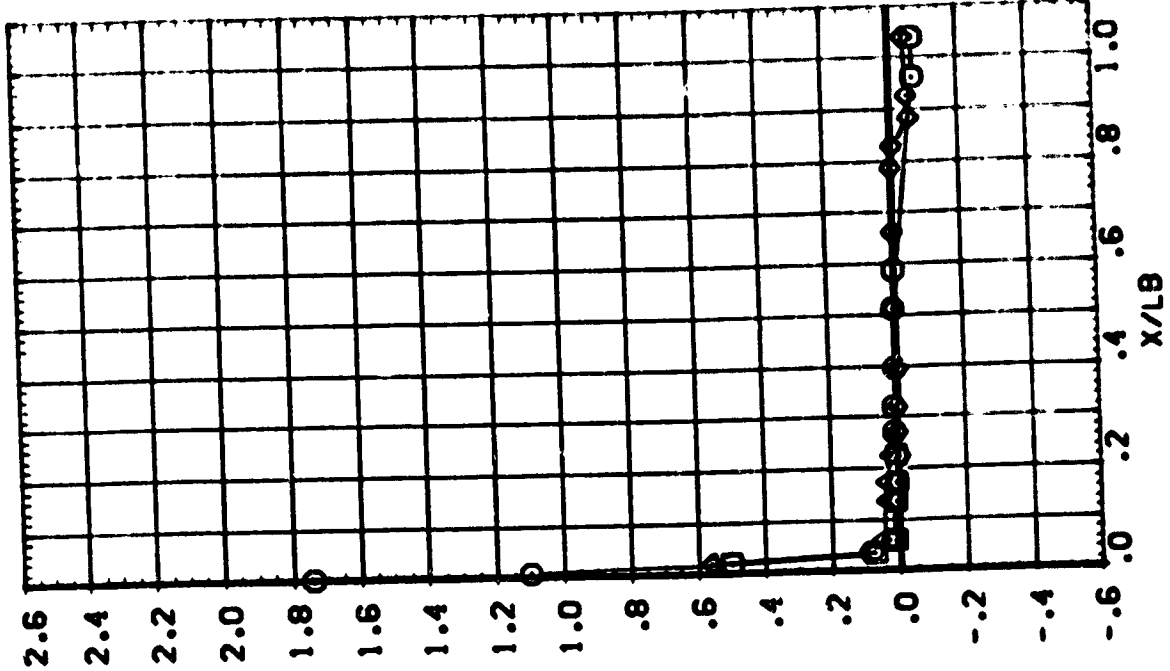
LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (R80308)

AVES 87-707 CA:2 C2A

PARAMETRIC VALUES
 ALPHA .000 RUDER .000
 ELEVON 10.000 RUFLR 40.000

SYMBOLS
 P-1 .000 MACH 3.501
 20.000 3.170
 40.000 3.190
 55.000

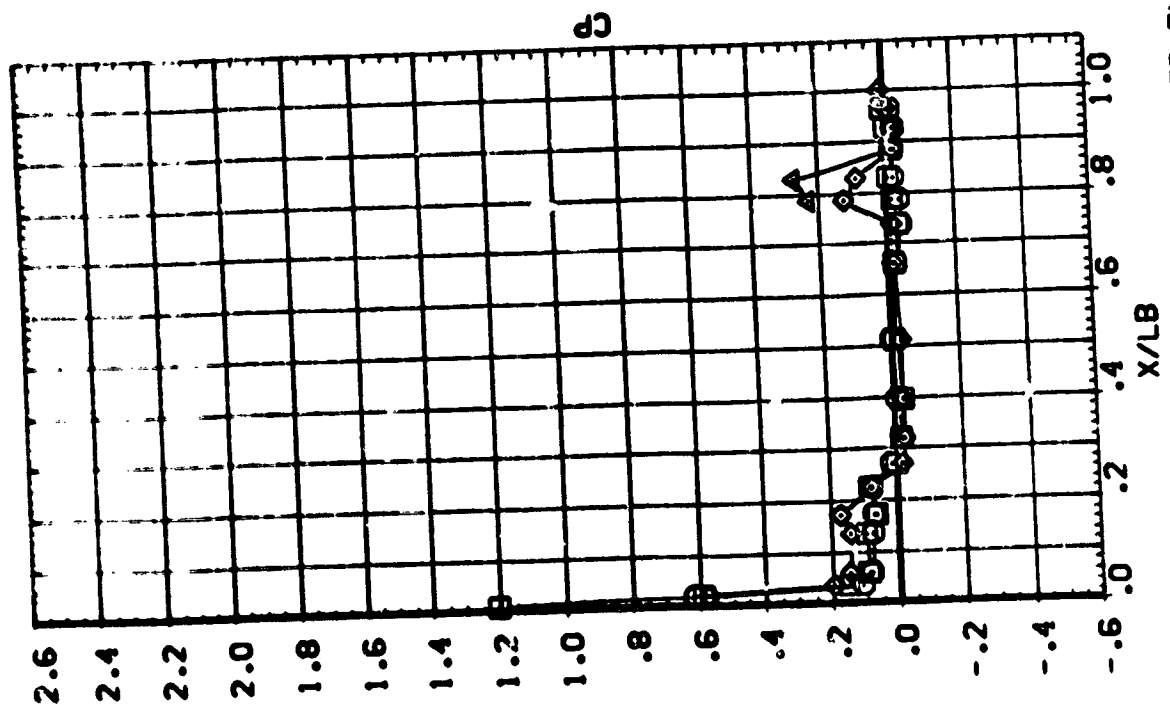
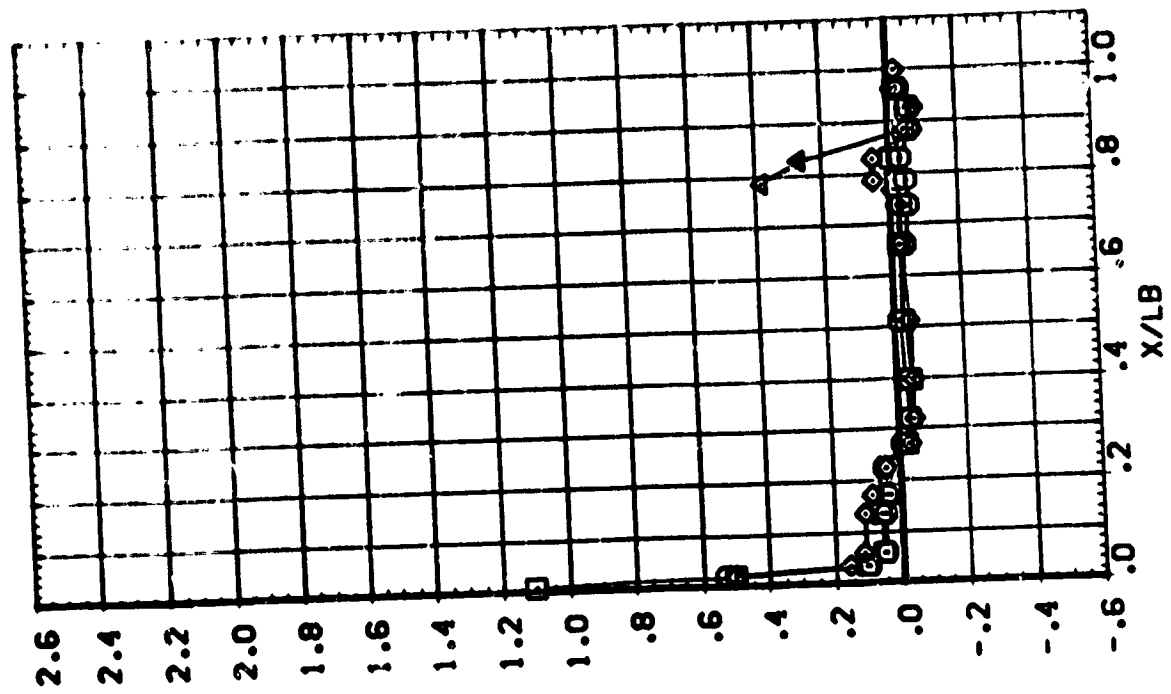


LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (R833C8)

PARAM: 0.12 10.45
 AREA 0.000 0.000 0.000
 ELEV 0.000 0.000 0.000

AV: 5 87 707 3A:2 32A
 3:1A 3:1C 3:1C
 3:1C 3:1C 3:1C
 3:1C 3:1C 3:1C
 3:1C 3:1C 3:1C



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES



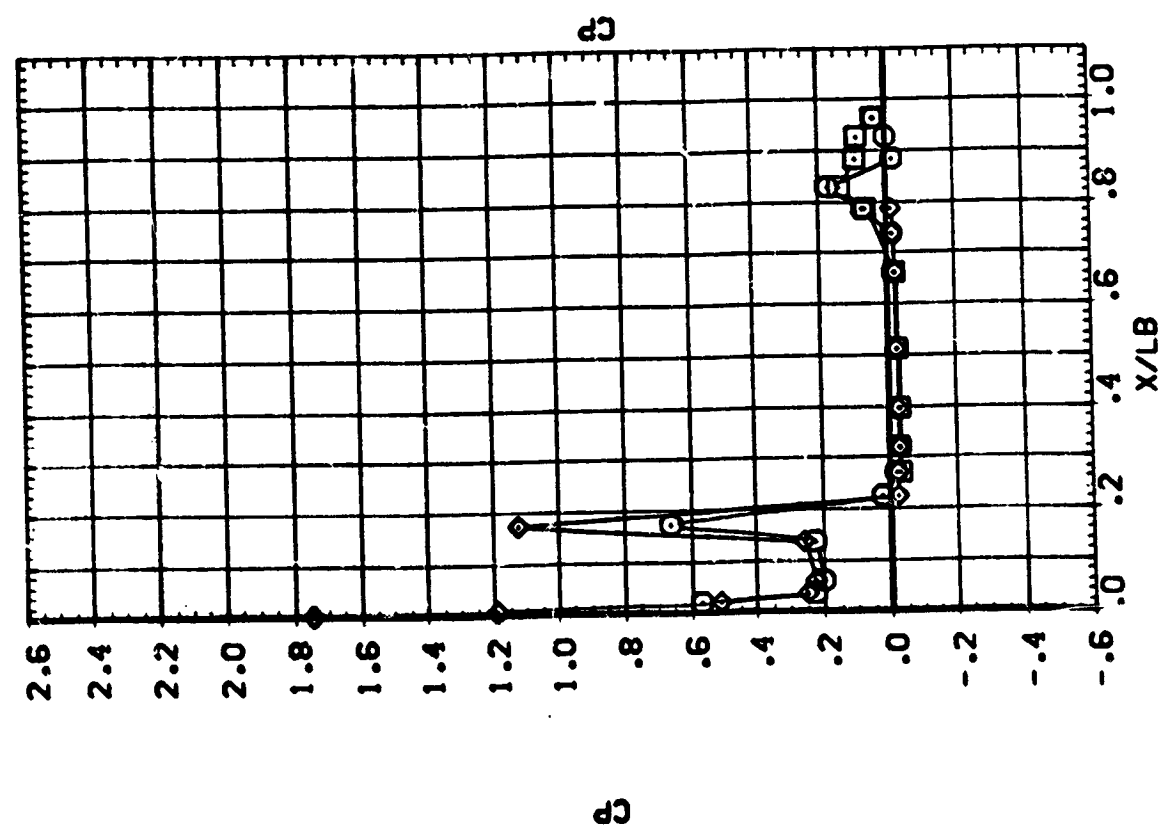
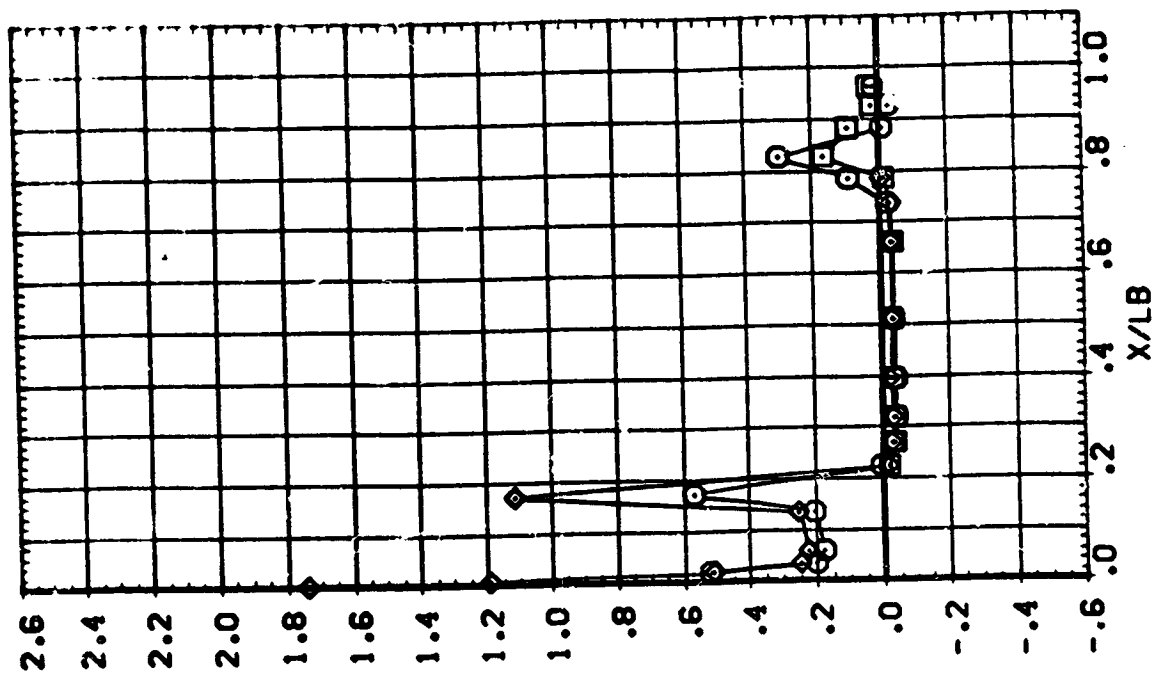
CRBITER FUSELAGE (RBQB08)

AVES 87-7C7 CA12 02A

PARAMETRIC VALUES
ALPHA .000
ELEVON 10.000
RUDER .000
RDLR 45.000

SYMBOL
150.000
165.000
180.000

BETA MACH
-.170 3.501
3.190



LONGITUDINAL DISTRIBUTION OF CRBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (R80808)

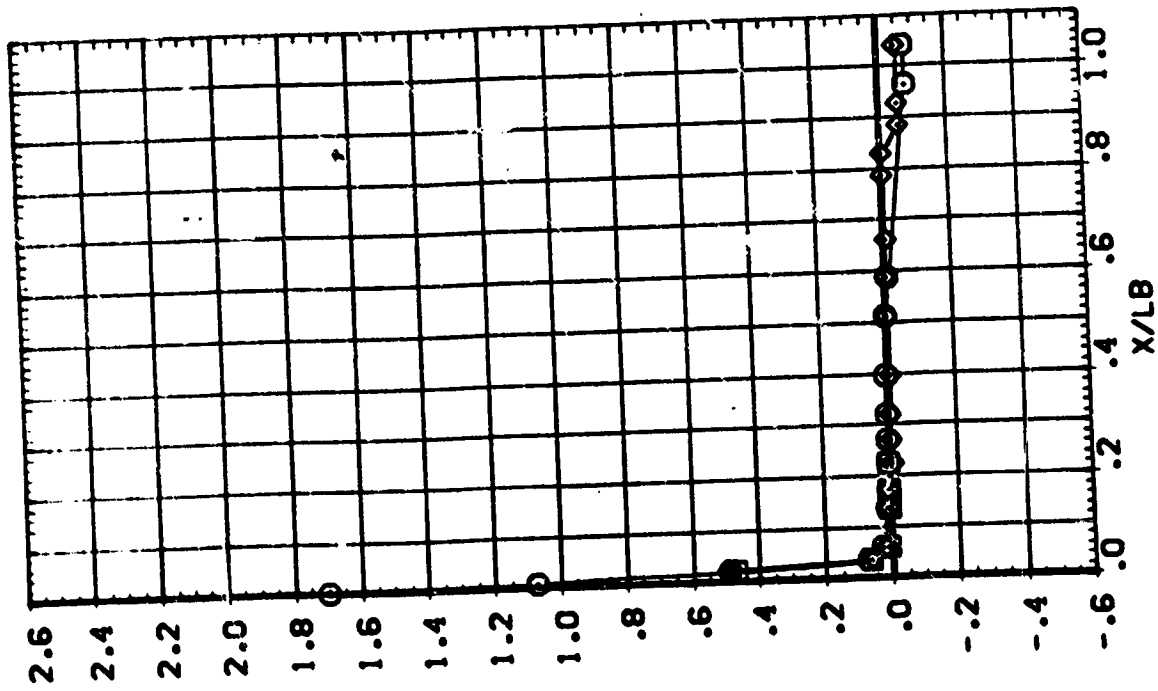
AVES 87-707 GA12 C2A

SYMBOL
 0.000
 20.000
 40.000
 60.000

BE TA 6.530 MACH 3.501

PARAMETRIC VALUES
 .000 .000 .000
 RJOER RJOFLR 40.000

ALPHA
 ELEVON



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RB0808)

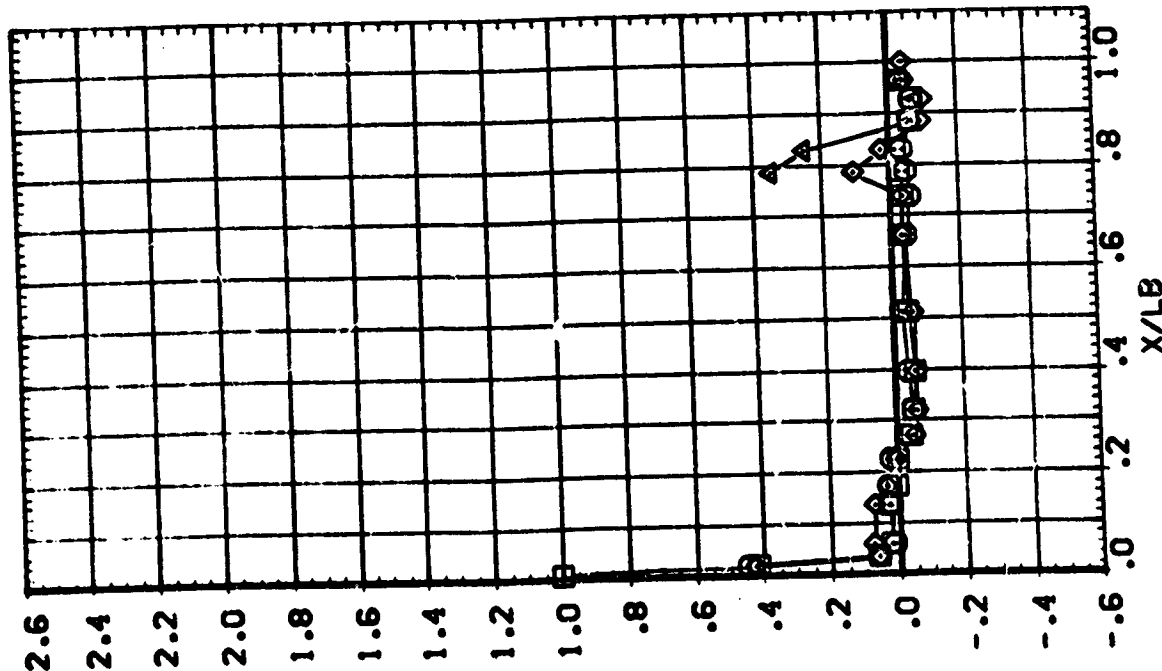
AVES 87-707 0A12 02A

SYMBOL
 ○ □ ◇ △

PMI
 75.000
 90.000
 170.000
 135.000

BETA 6.530
 WACH 3.501

PARAMETRIC VALUES
 ALPHA
 ELEVON
 .000
 .300
 10.000
 RUDER
 RUDLP
 45.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBQB08)

AMES 87-707 CA:2 32A

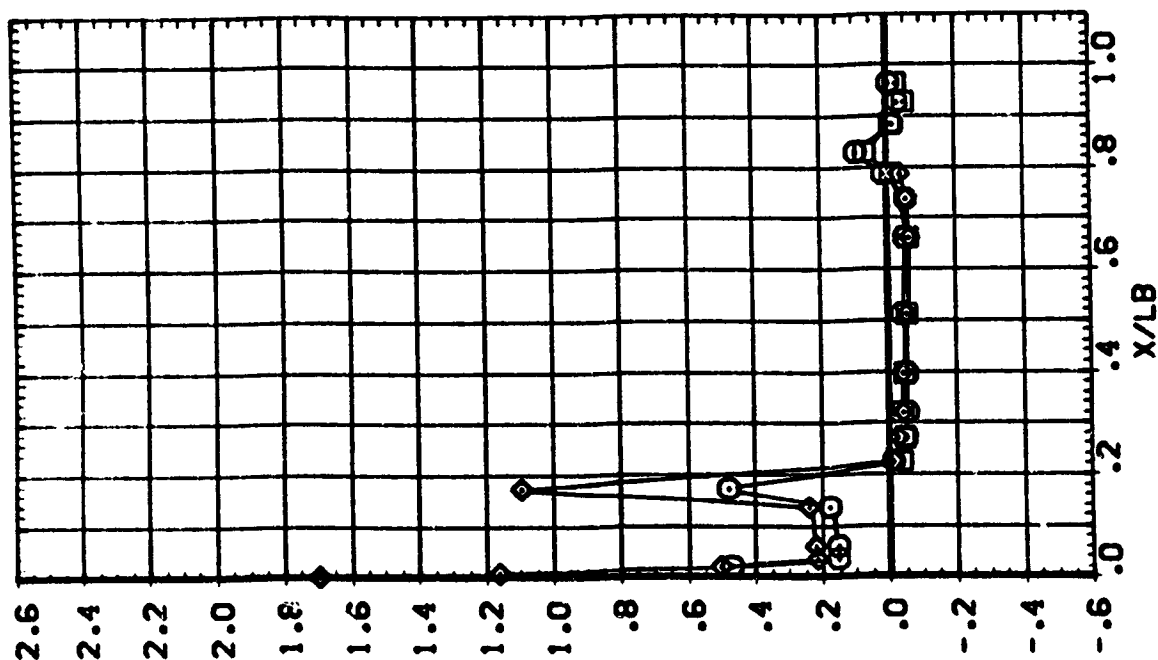
SYMBOL
○ ○ ○
◇

PM: 150.000
:55.000
:80.000

ALPHA
ELEVON

PARAMETRIC VALUES
.000
10.000
RUDER
RUDER

.000
40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

III

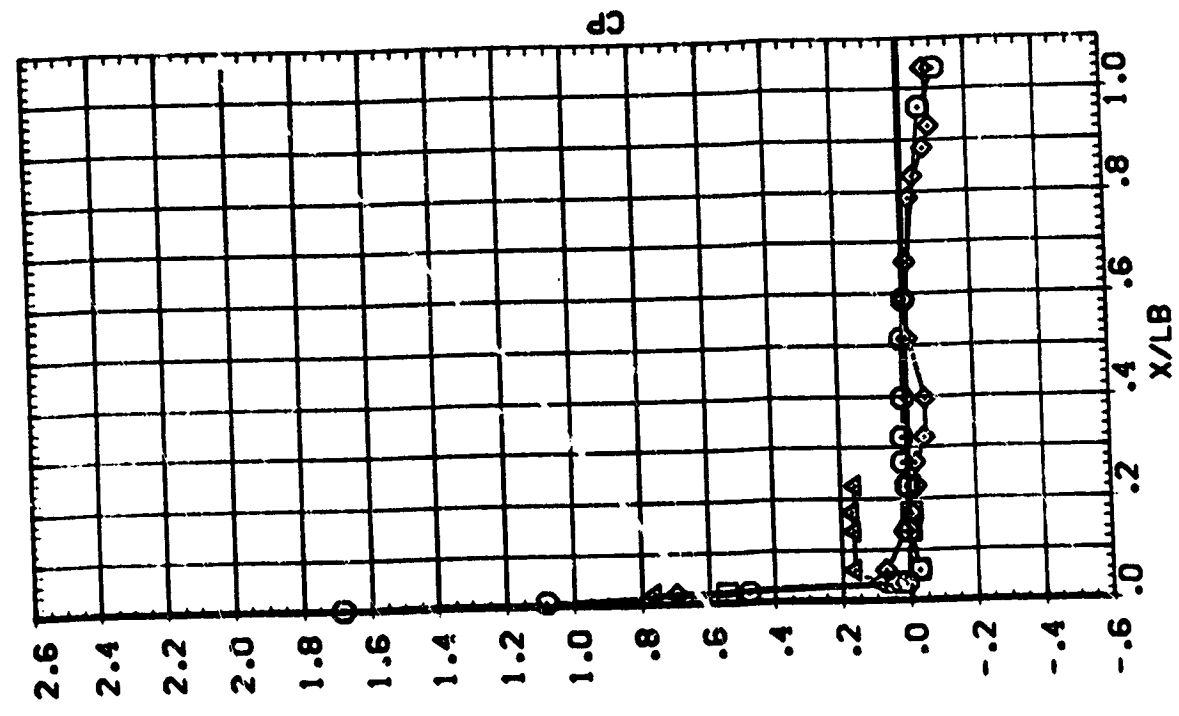
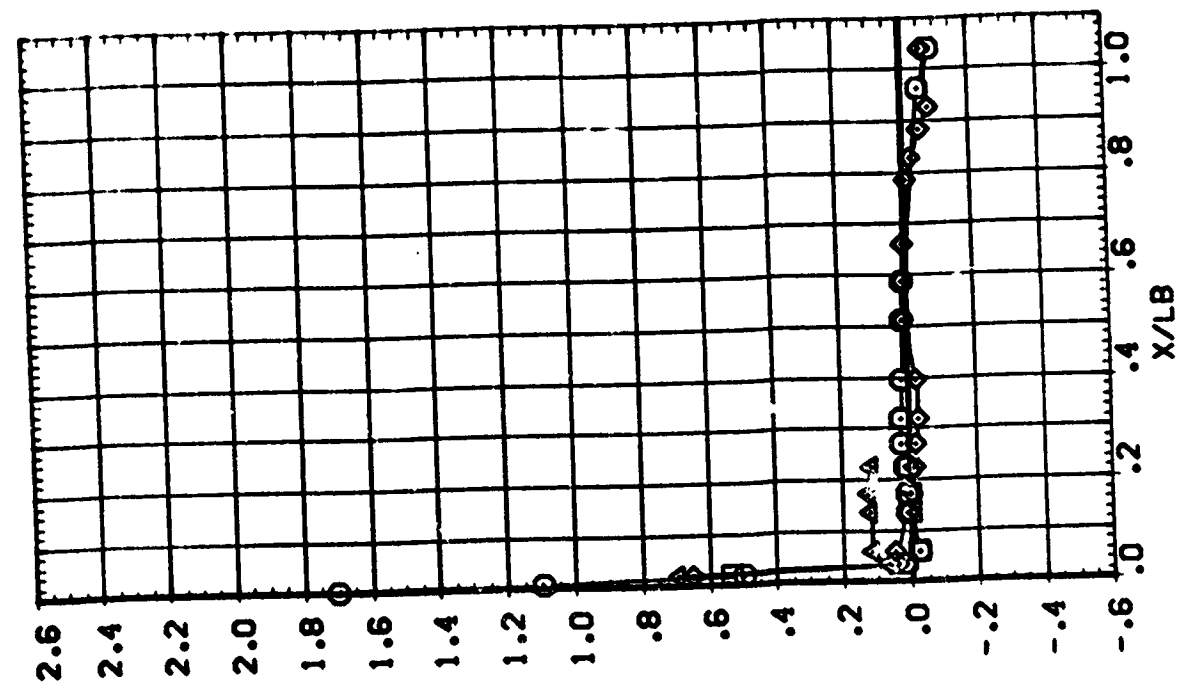
ORBITER FUSELAGE (RBQB11)

AVES 87-707 CA12 32A

PARAMETRIC VALUES
 ALPHA .000 RUDER .000
 ELEVON -20.000 RUDFLR 40.000

PHI .000 MACH 2.458
 BETA -6.440
 -3.300

SYMBOL
 O □ ◇ △



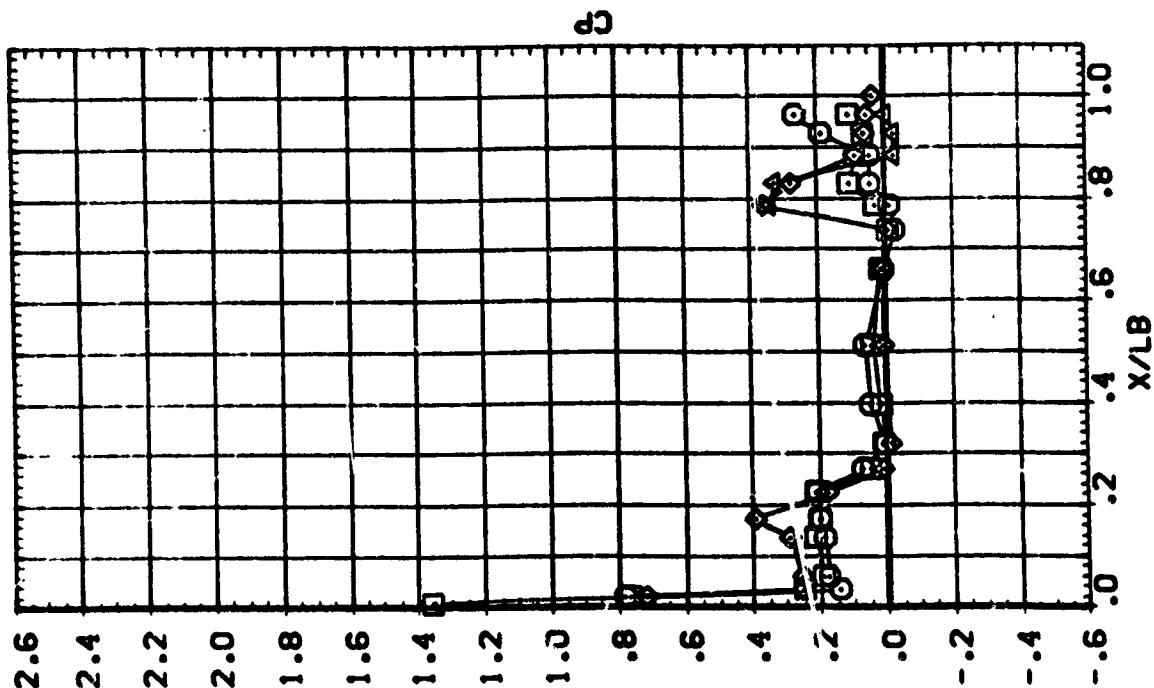
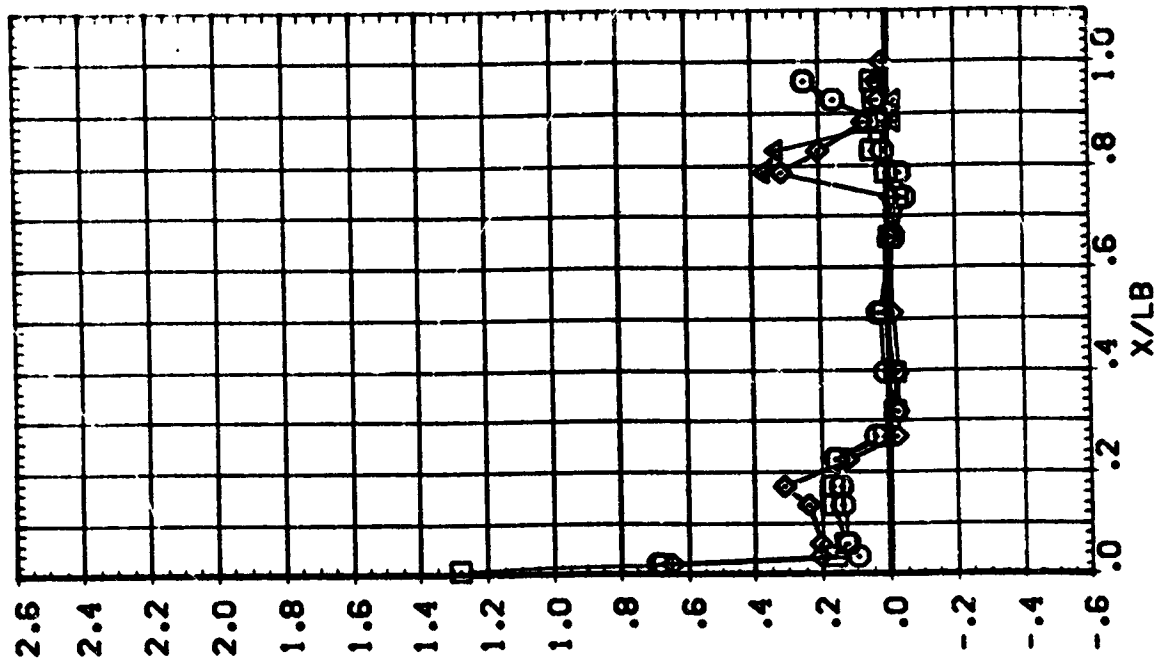
LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBQB11)

AVES 87-707 CA:2 02A

PARAMETRIC VALUES
 ALPHA .000 RUDDER .000
 ELEVON -20.000 RJOFLR 40.000

SYMBOL IMI BETA MAC#
 70.000 -6.440 2.198
 90.000 -3.300
 170.000
 135.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBCB11)

AMES 87-707 CA12 02A

SYMBOL
 150.000
 165.000
 166.000

PHI
 150.000
 165.000
 166.000

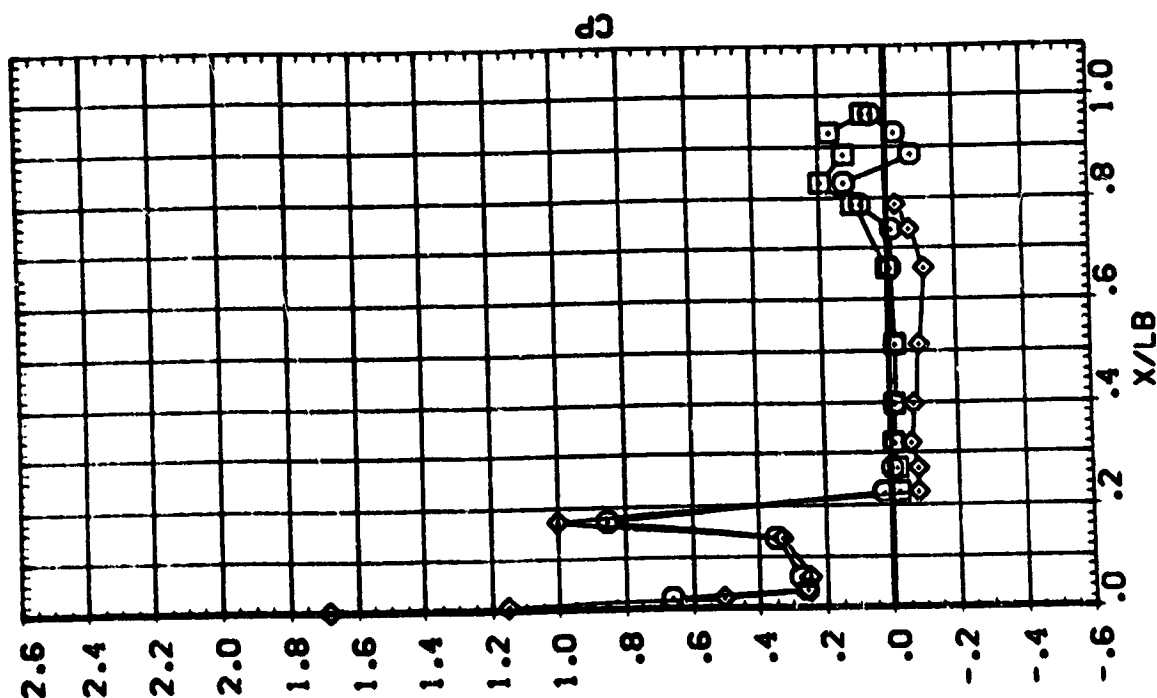
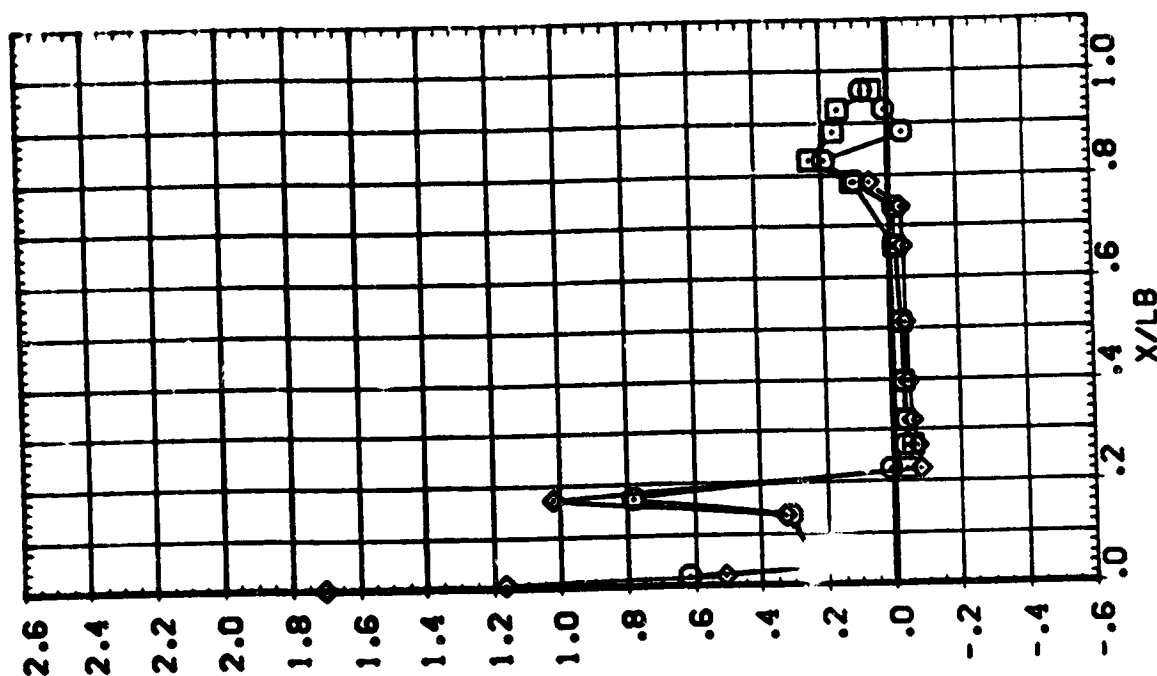
BETA
 -6.440
 -3.300

MACH
 2.498

PARAMETRIC VALUES

ALPHA
 ELEVON

0.000
 -20.000
 0.000
 40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBQB11)

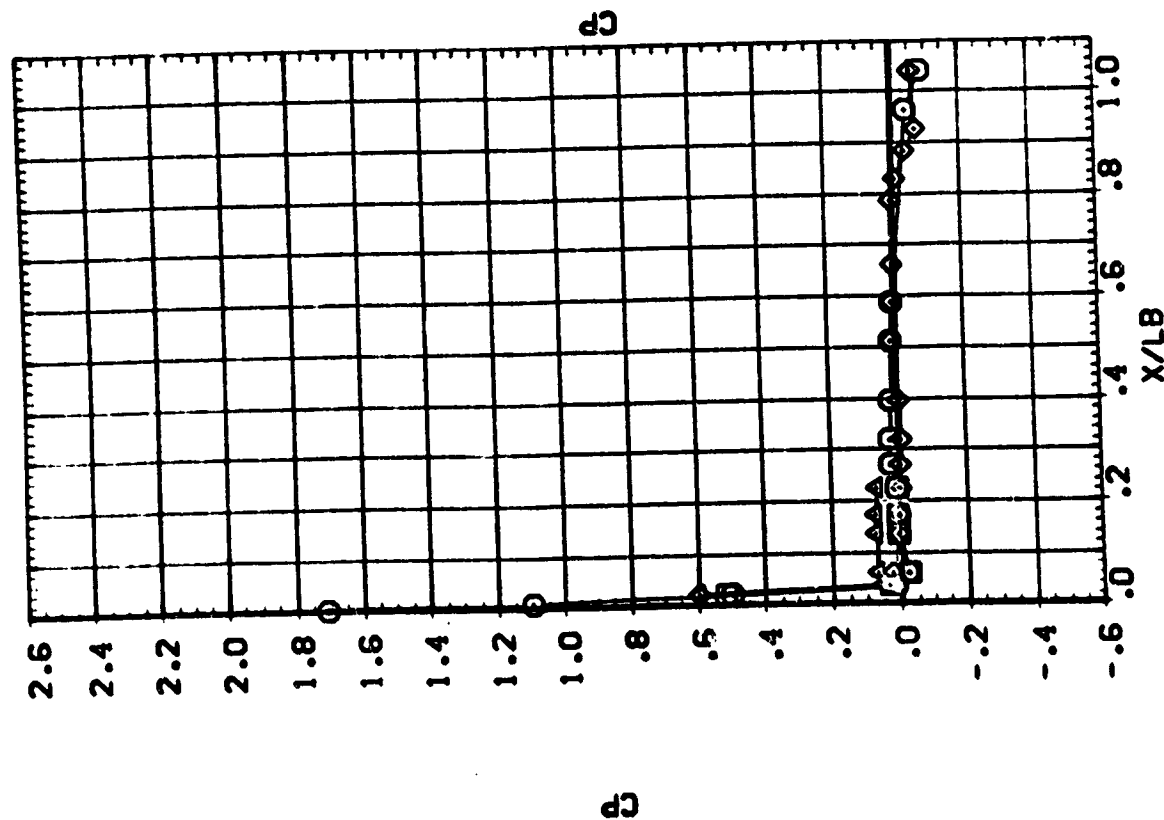
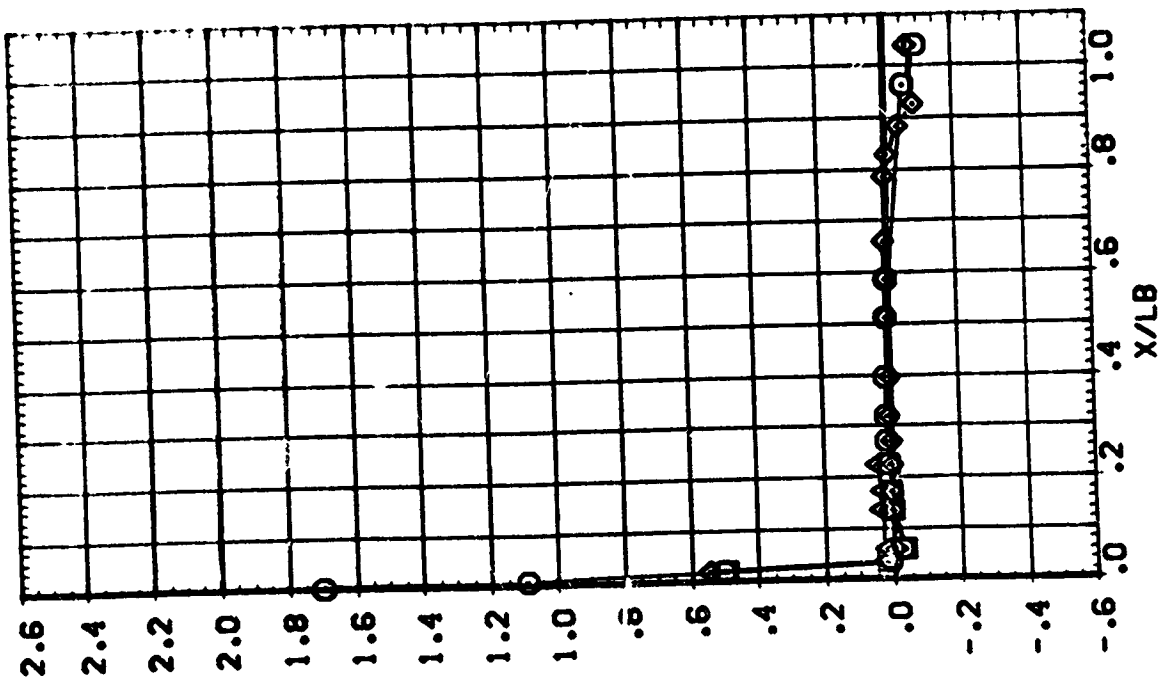
AMES 87-707 0A12 02A

SYMBOL
 ○ 0.000
 ◇ 20.000
 △ 40.000
 ▲ 55.000

BETA
 -0.220
 3.370

MACH
 2.498

PARAMETRIC VALUES
 ALPHA
 ELEVON
 -20.000
 RUDER
 10.000
 RUDFLR
 40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBCB!!)

AMES 87-707 CA12 02A

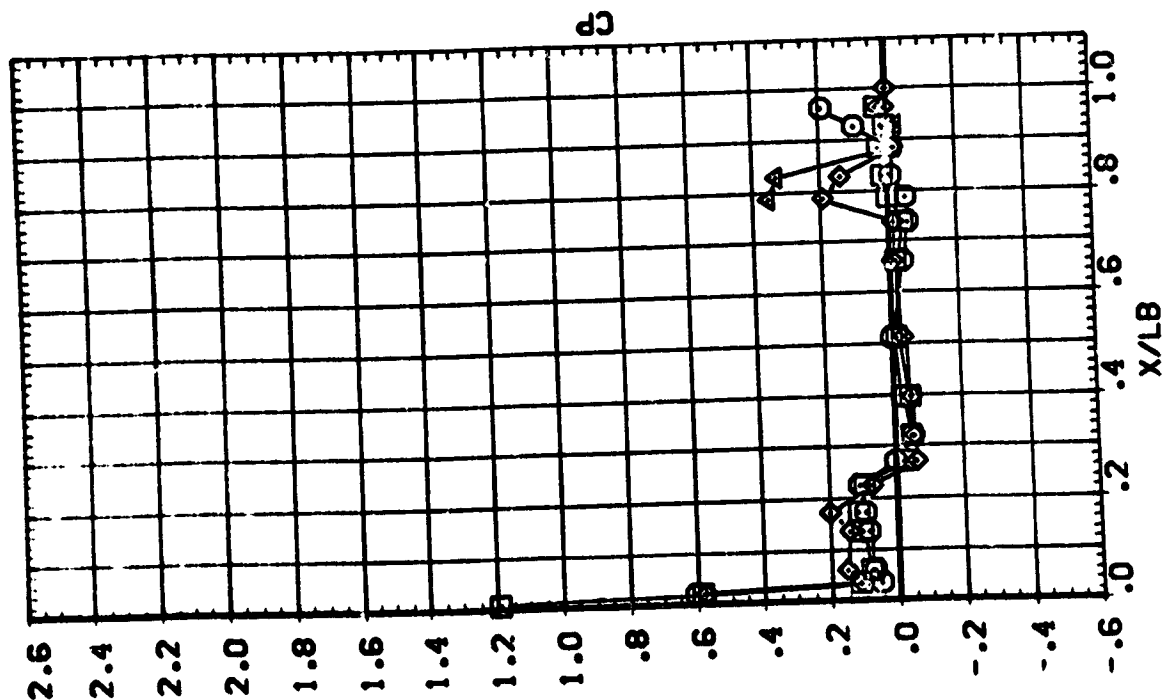
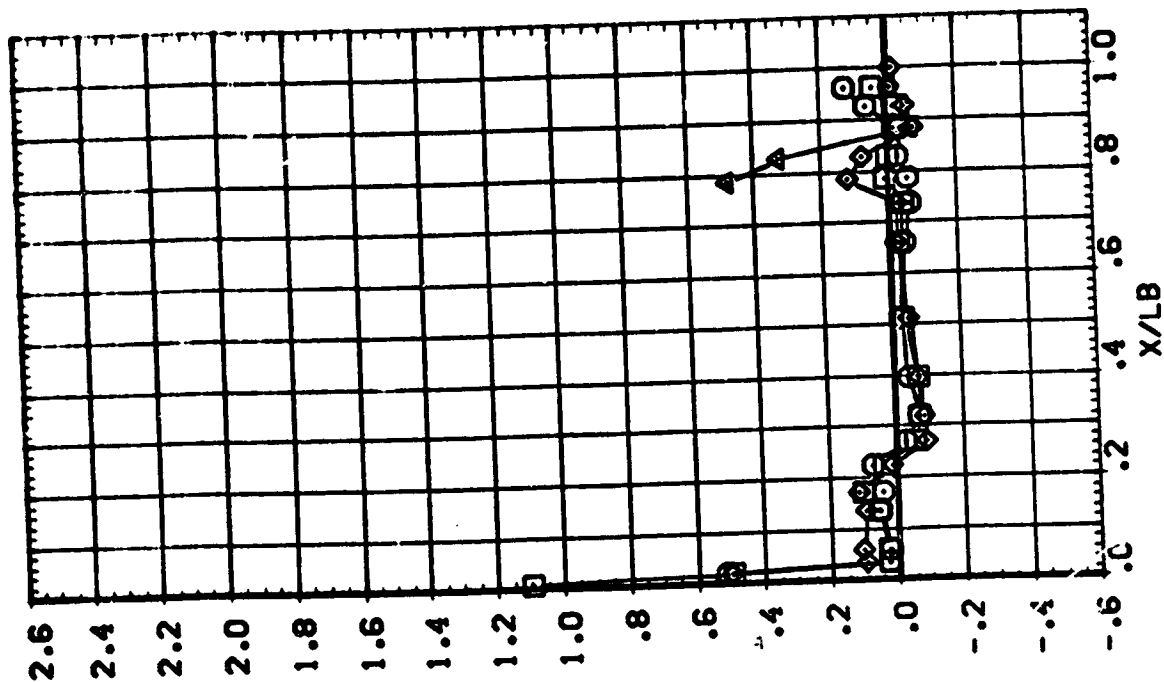
	ALPHA	PARAMETRIC VALUES
	ELEVATION	R.D.O.I.R.
		.500 R.D.O.I.R.
		.300 R.D.O.I.R.
		40.300
		.300

5780

PA-1
70.000
90.130
120.000
135.000

BETA	MACH
.720	2.498
3.373	

MACH 2.49



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (R80B11)

AVES 87-707 CA:2 C2A

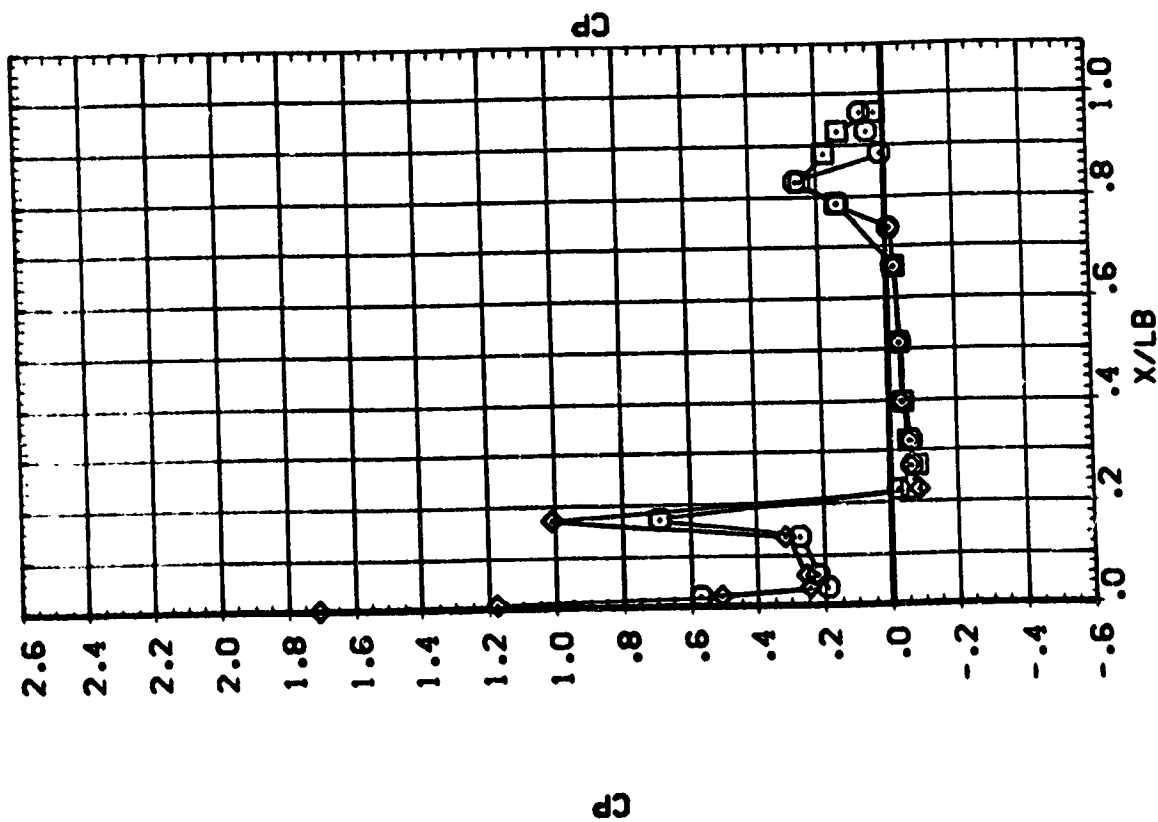
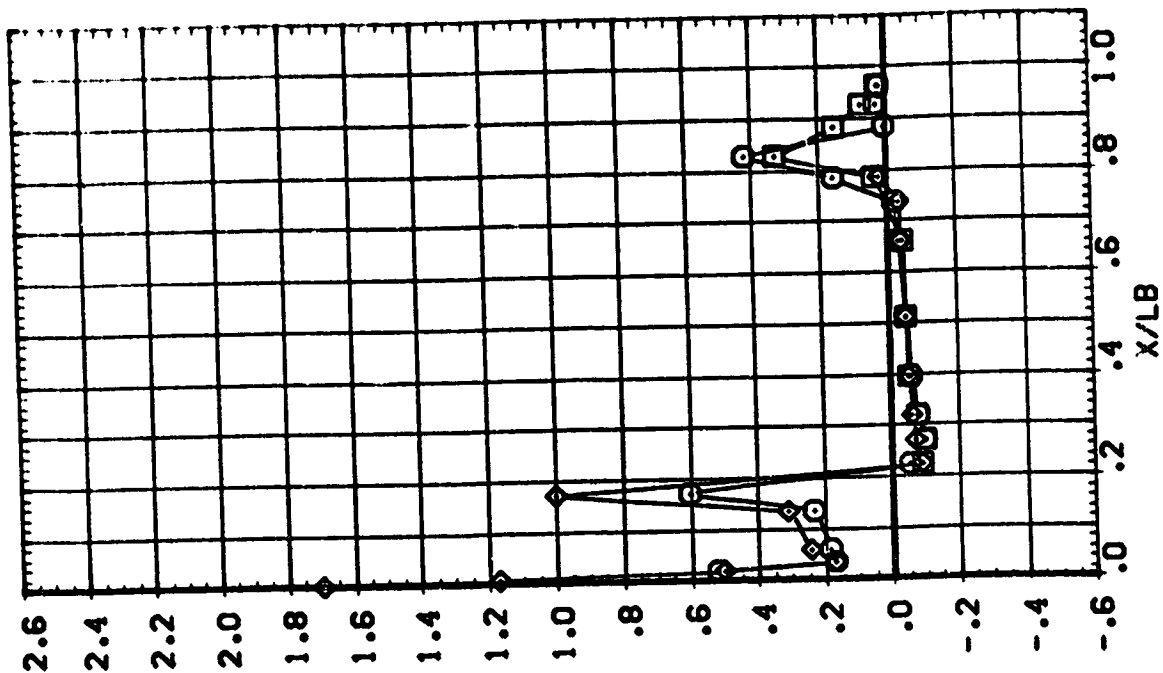
SYMBOL
 ○ □ ◇

PAI
 150.000
 165.000
 180.000

BETA
 -0.720
 3.070

WAC
 2.498

PARAMETRIC VALUES
 .000 RLODR .000
 -70.000 RLOFLR 40.000
 ALPHA
 ELEVON



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBQB1:)

AMES 87-707 3A:2 C2A

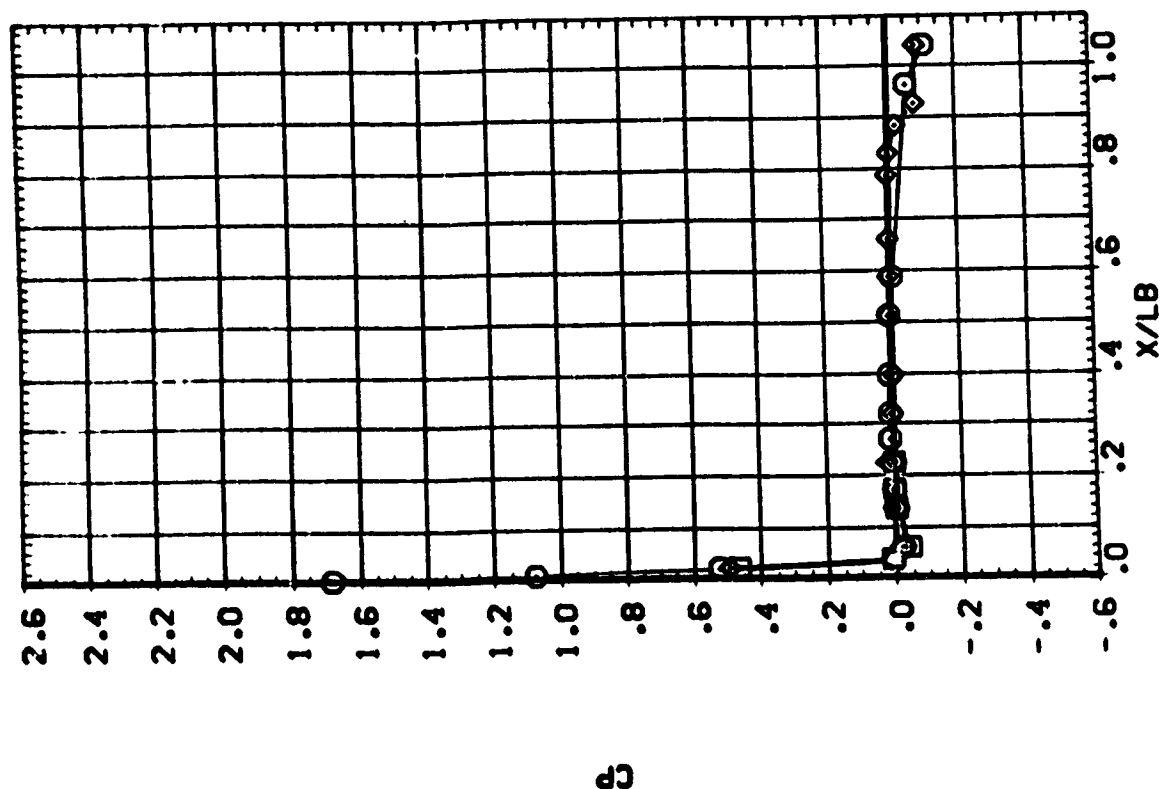
PARAMETRIC VALUES
 .000 .000 .000
 -70.000 R.O.F.L.R
 40.000

ALPHA
 ELEVON

BETA MACH
 6.300 2.458

PHI
 .000
 20.000
 40.000
 55.000

SYMBOL
 □ □ □
 ◇ ◇



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (R80B11)

AVES 87-707 CA12 02A

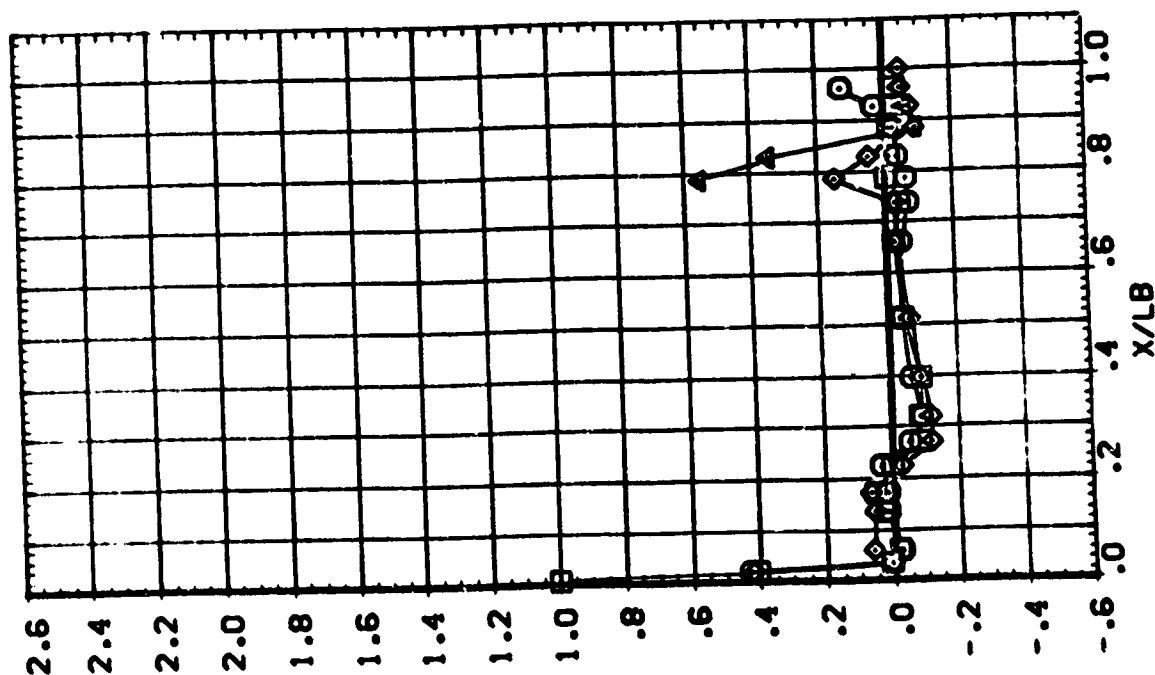
SYMBOL
□
◇
△

PMI
70.000
90.000
120.000
135.000

BETA 6.300 MACH 2.498

ALPHA
ELEVON

PARAME'RIC VALUES
.000
-20.000
40.000
RLODER
RLODER
RLODER

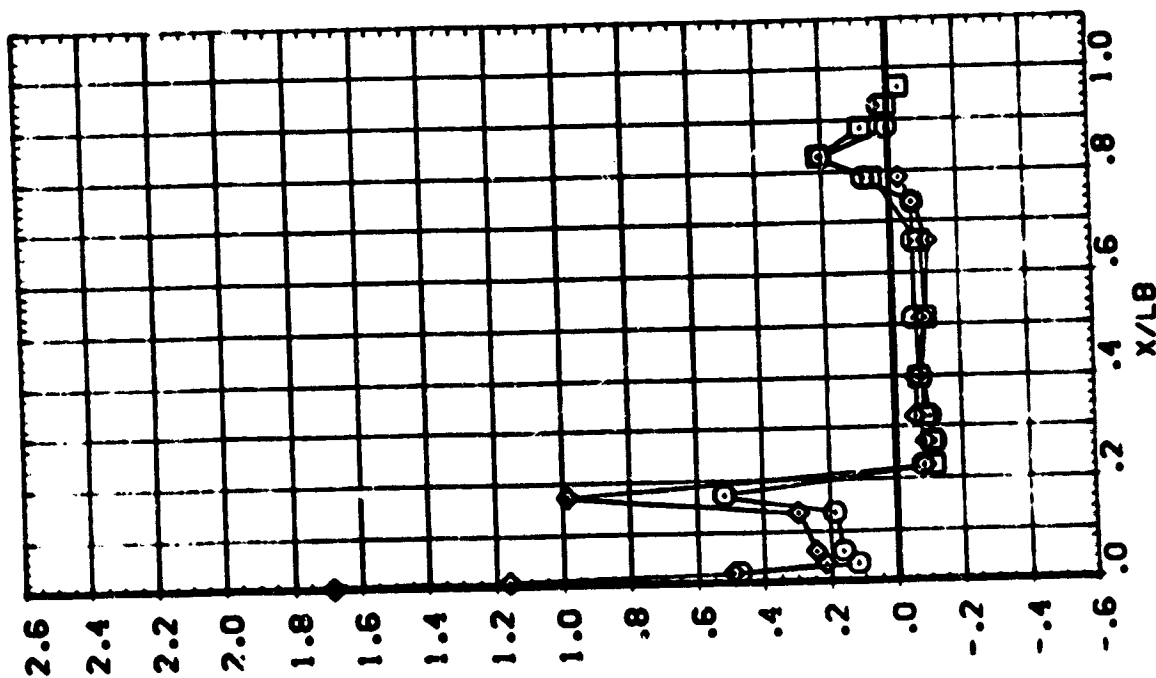


LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

AVES 87-707 CA:2 02A

3047357 - 3111823

ALPHA	0.000	0.000	0.000
LEVON	-70.000	0.000	0.000
DATA	0.000	0.000	0.000
DATA	0.000	0.000	0.000

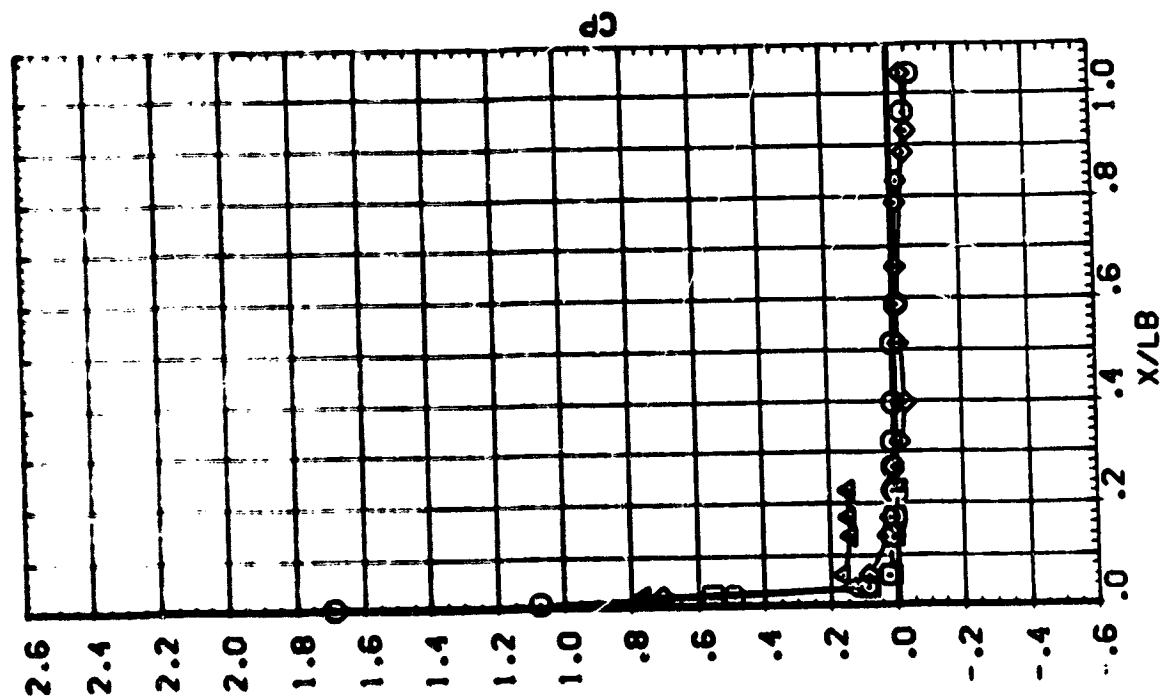
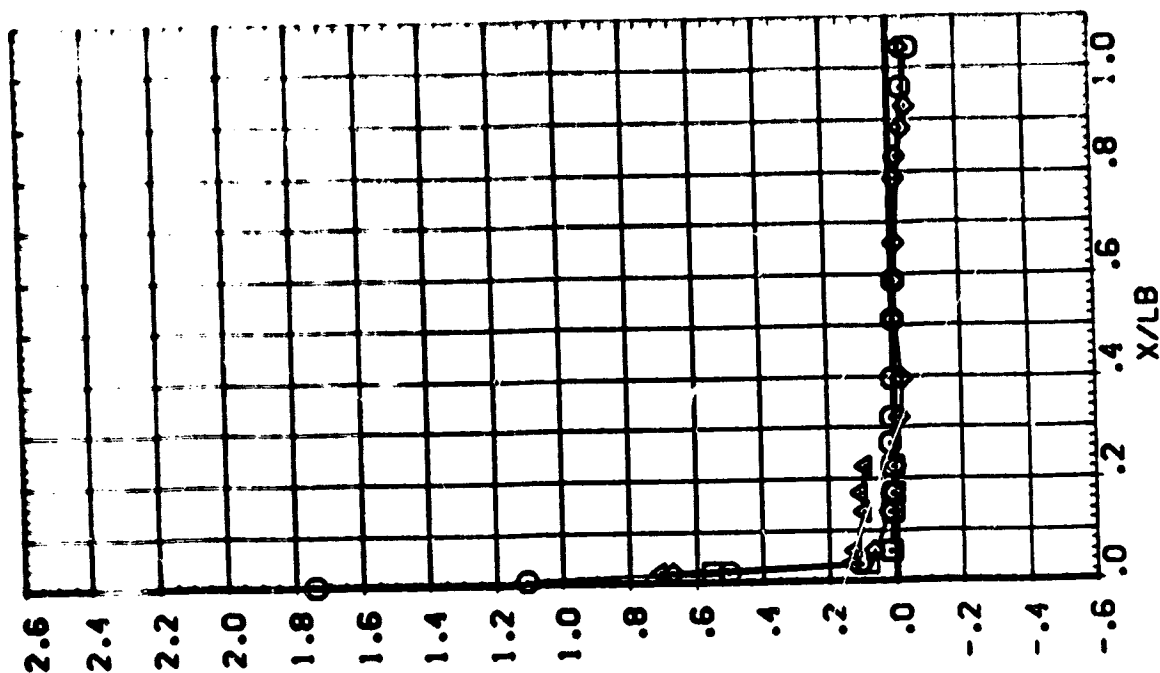


LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

33-34 33-34
 33-34 33-34
 33-34 33-34

19

3.4.3
6.570
-40- 3.523

[illegible]

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

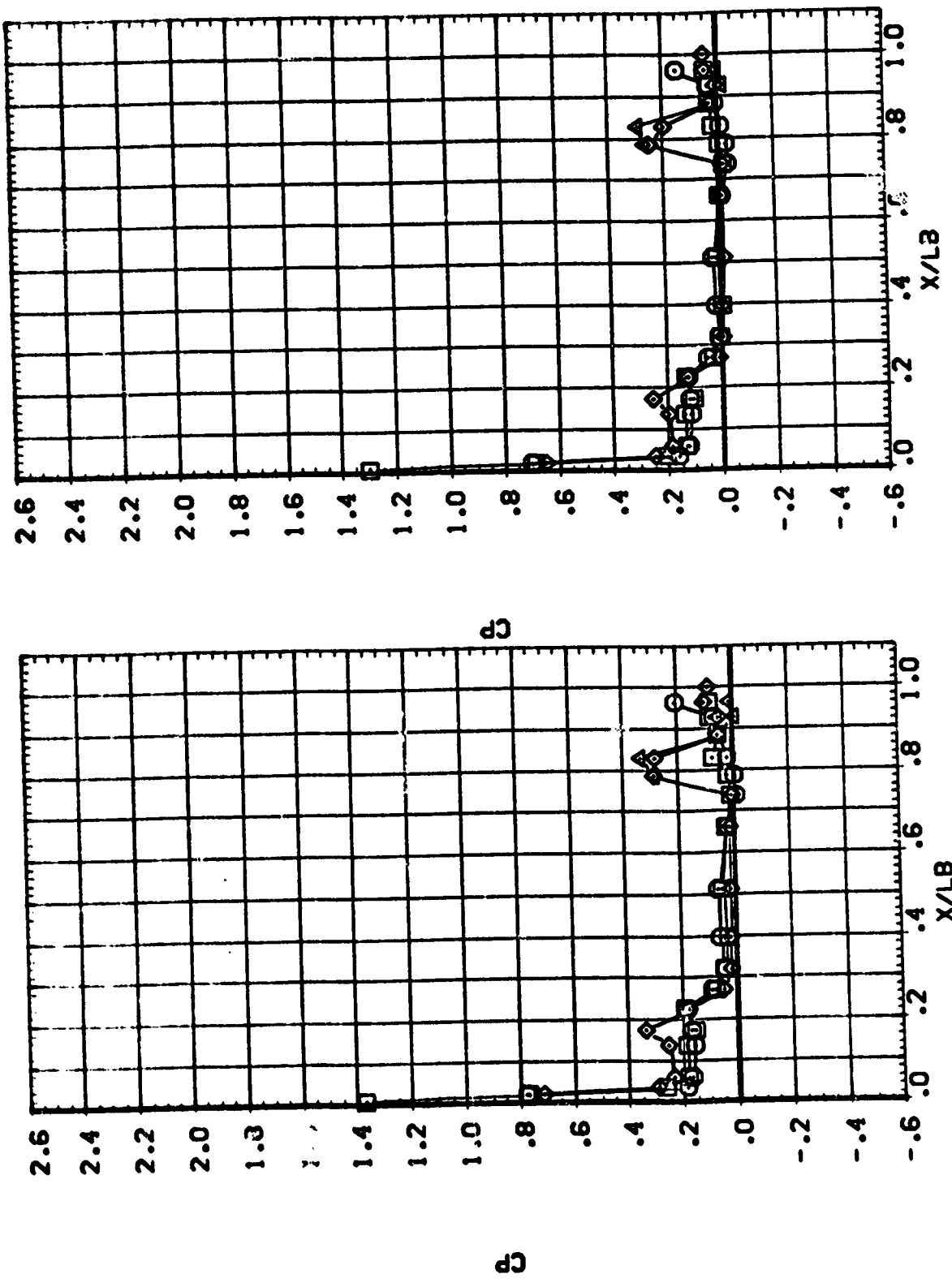
ORBITER FUSELAGE (R80811)

PARAMETRIC VALUES
 .000 .000 .000
 ALPHA RUDER
 ELEVON -20.000 RUDFLR 40.000

AVES 87-7C7 CA12 02A

REF: 70.000 MACH 3.502
 90.000
 120.000
 130.000

SYMBOL
 O
 X
 Δ



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RB0811)

AVES 87-707 CA12 C2A

SYMBOL
 150.000
 165.000
 180.000

BE TA
 6.670
 3.410

MACH

3.502

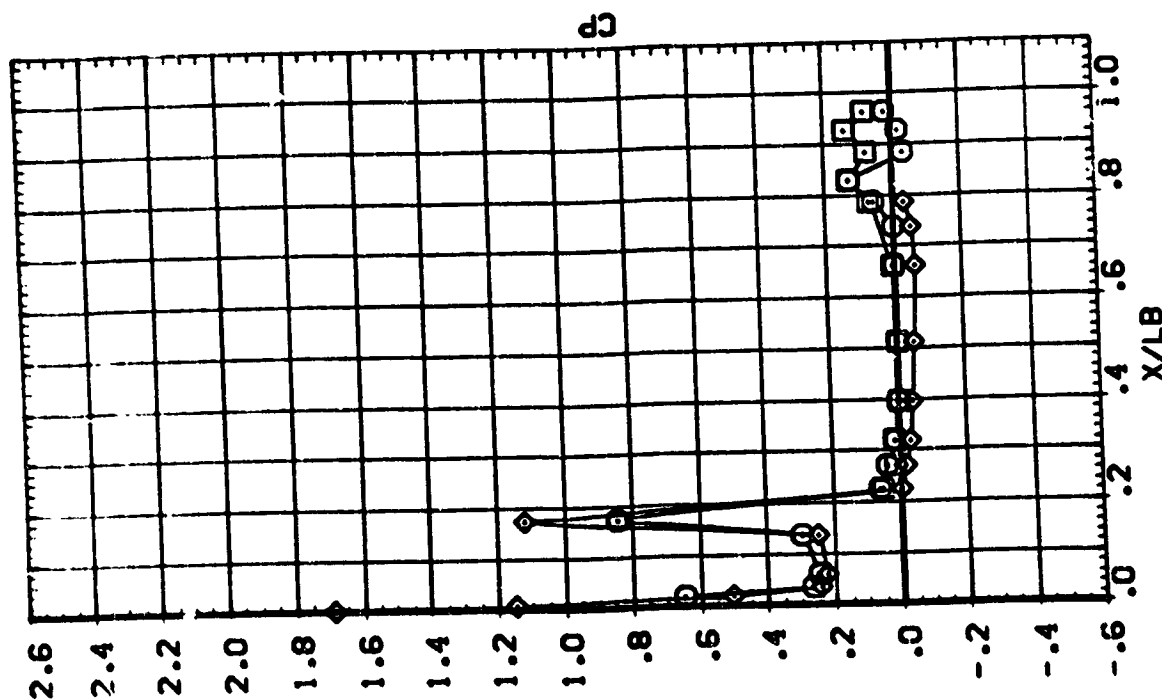
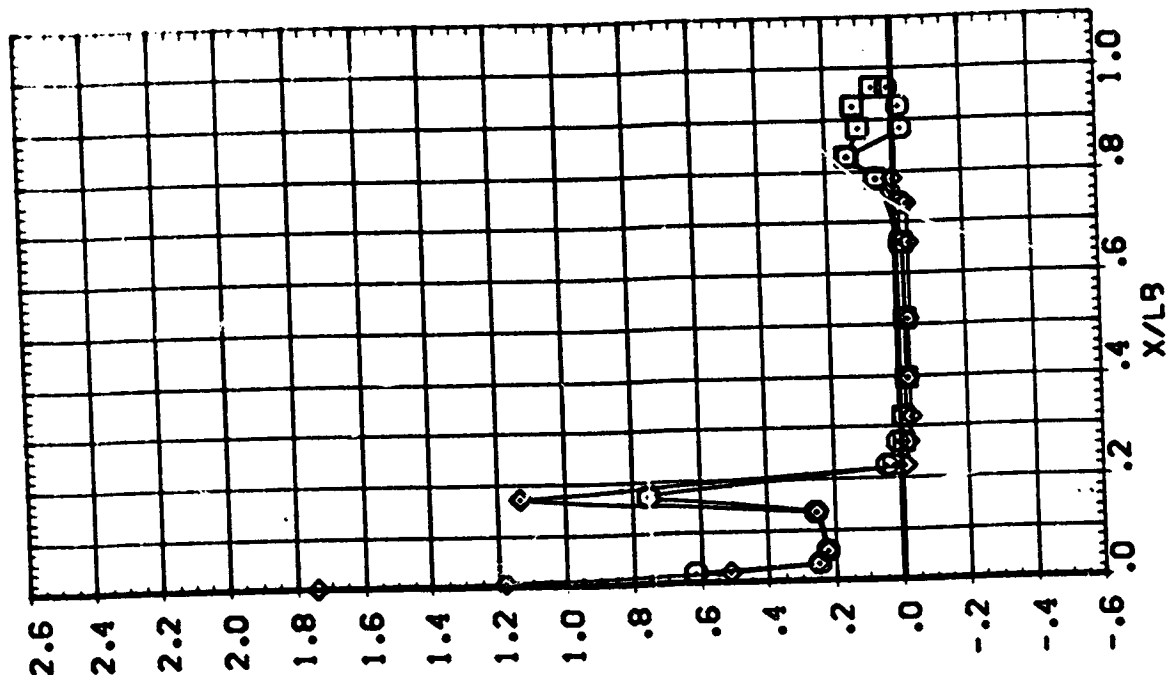
PARAMETRIC VALUES

ALPHA
 ELEVON

0.000
 -20.000

RUDER
 RUDLR

0.300
 40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBOB11)

AVES 87-707 CA12 02A

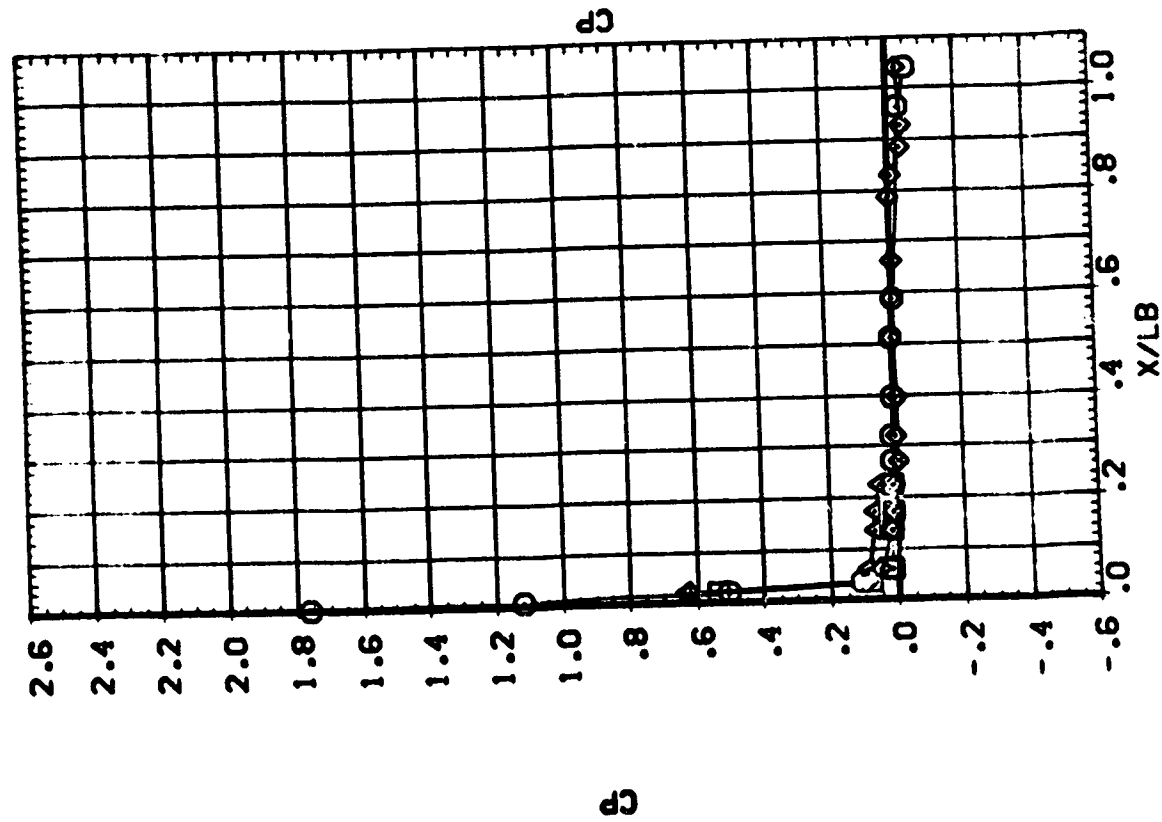
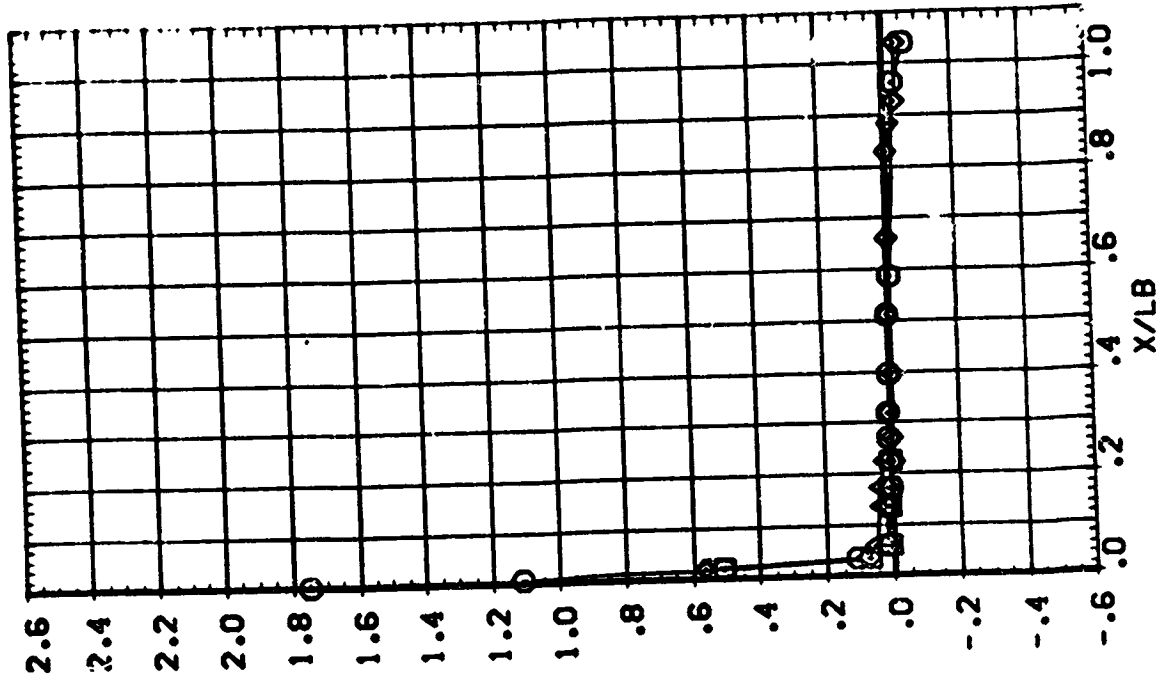
SYMBOL
 ○ □ ◇ △

PH: .000
 20.000
 40.000
 55.000

BE'A .160
 3.180

PACH 3.502

PARAMETRIC VALUES
 .000 .000
 RJOER RJOFLR
 -20.000 40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBQB11)

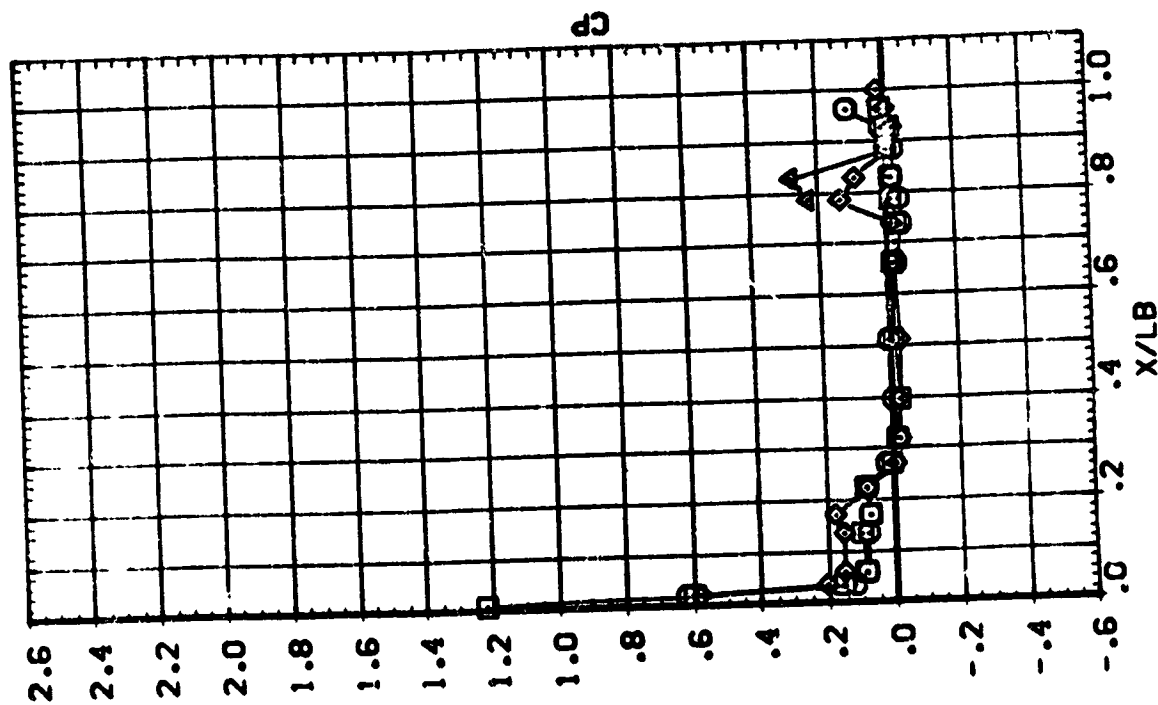
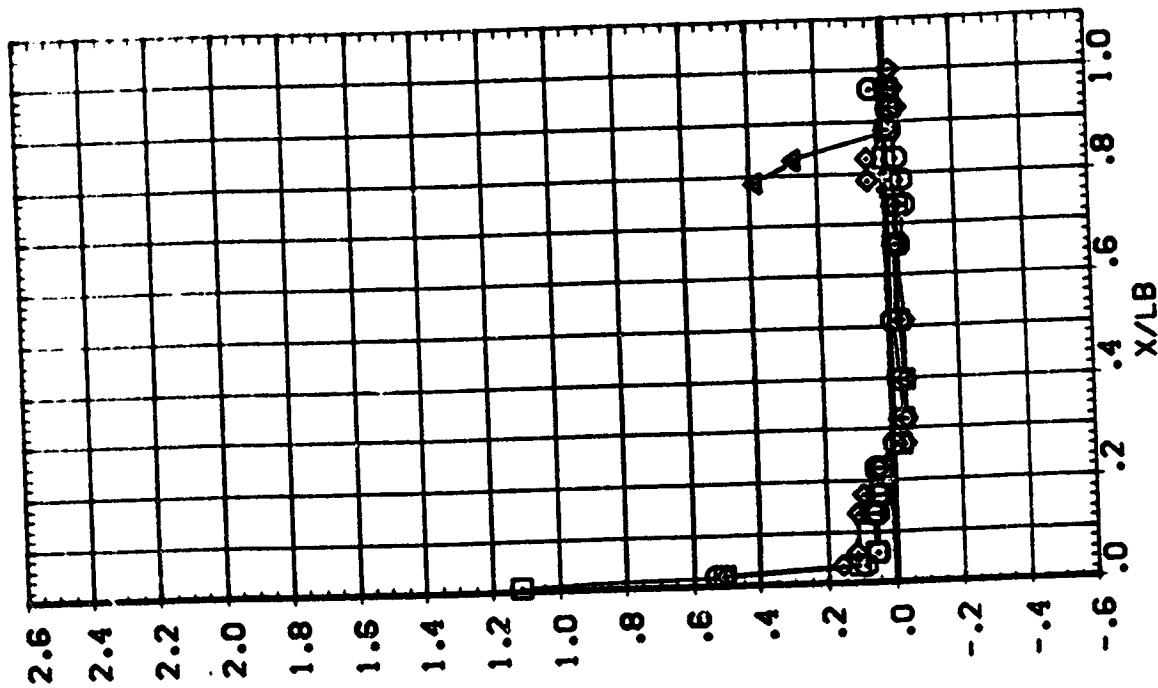
AVES 87-707 GA12 C2A

5/1/82
 70.000
 90.000
 120.000
 150.000

BETA
 .160
 3.180

MACH
 3.500

PARAMETRIC VALUES
 ALPHA
 ELEVON
 .000
 -20.000
 RUDER
 RUDLR
 .000
 40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBQB11)

AMES 87-707 0A12 02A

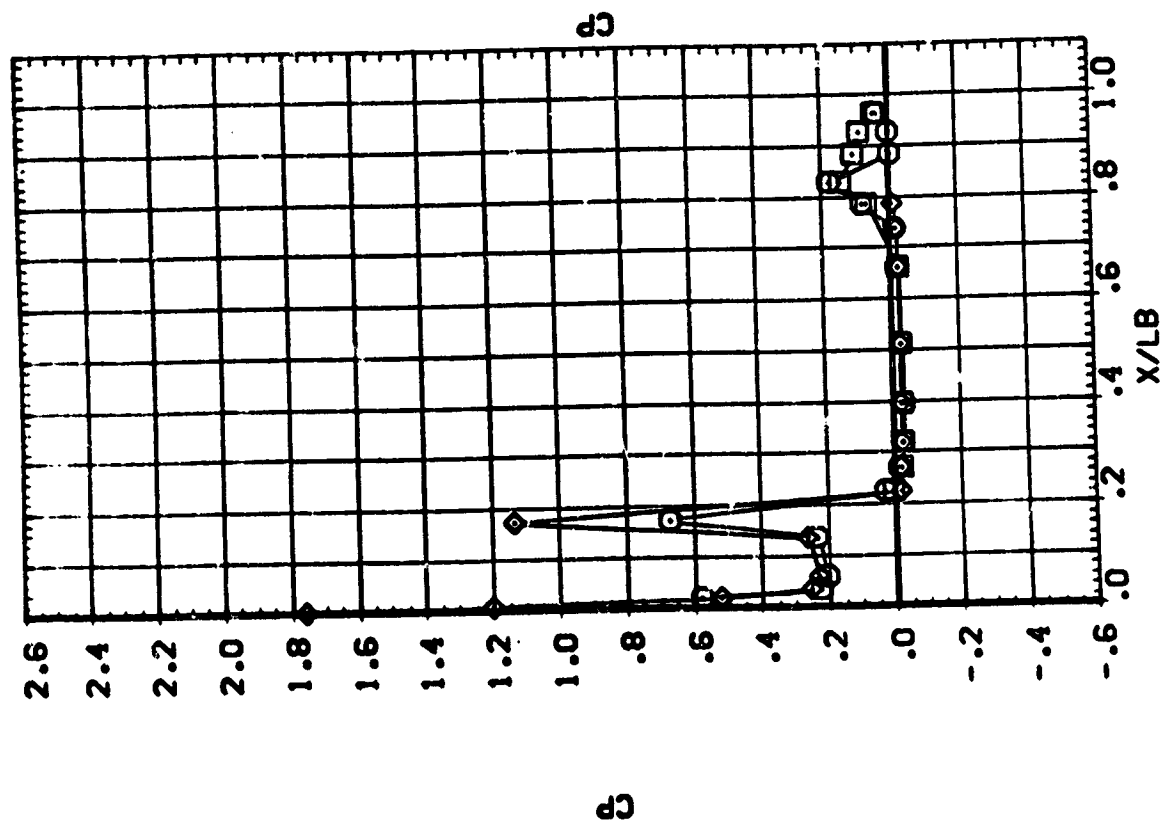
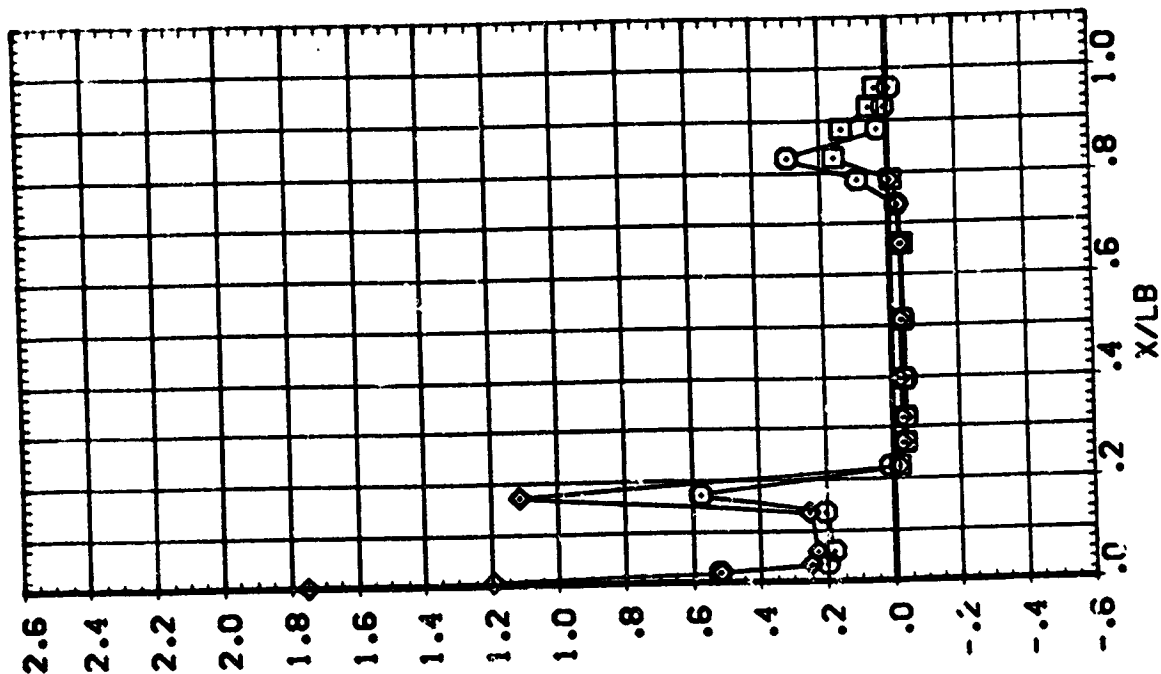
PARAMETRIC VALUES
 .000 .000 .000
 RLODR RLODR RLODR
 -20,000 -20,000 -20,000
 40,000 40,000 40,000

ALPHA
 ELEVON

BE TA MACH
 -1.60 3.502
 3.180

PHI
 150.000
 165.000
 180.000

SYMBOL
 ○ □ ◇



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (R80811)

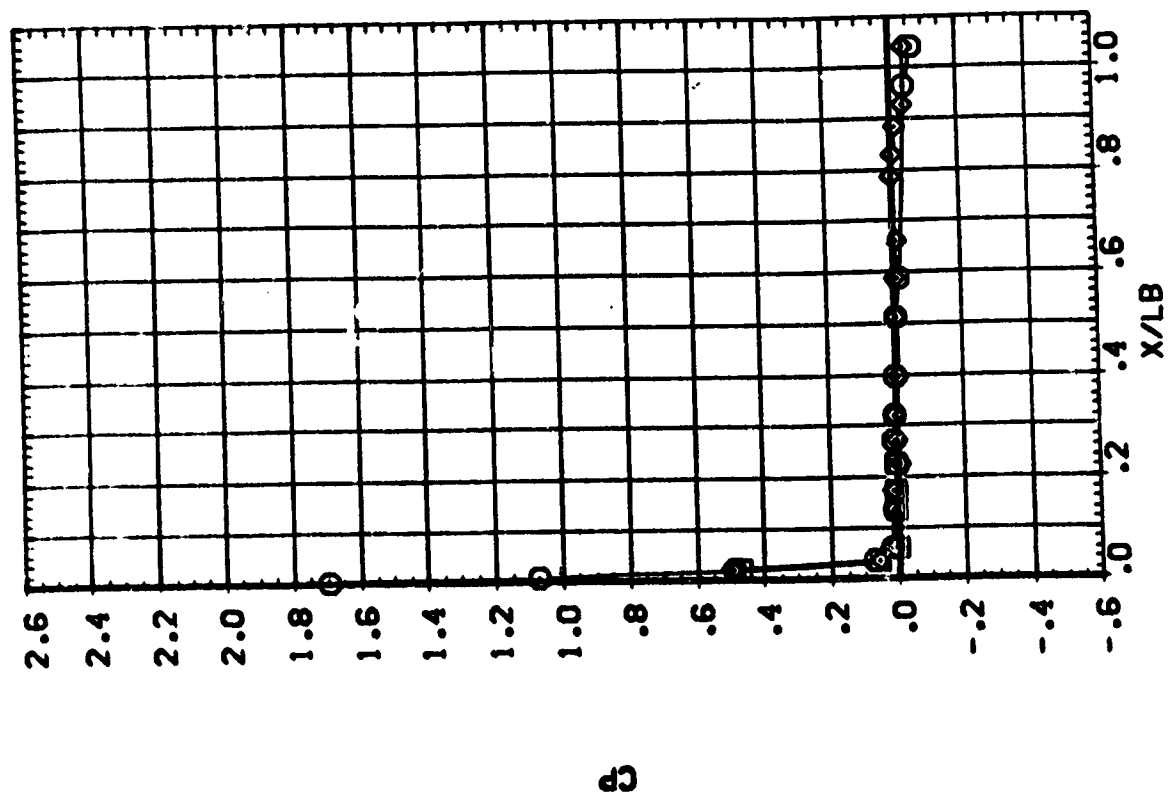
AVES 87-707 CA:2 02A

SYMBOL
 ○ □ ◇ △

PA: .000
 20.000
 40.000
 55.000

BETA 6.530
 MACH 3.502

PARAMETRIC VALUES
 ALPHA .000
 ELEVON -20.000
 RUDDER .000
 RUDLER 40.000



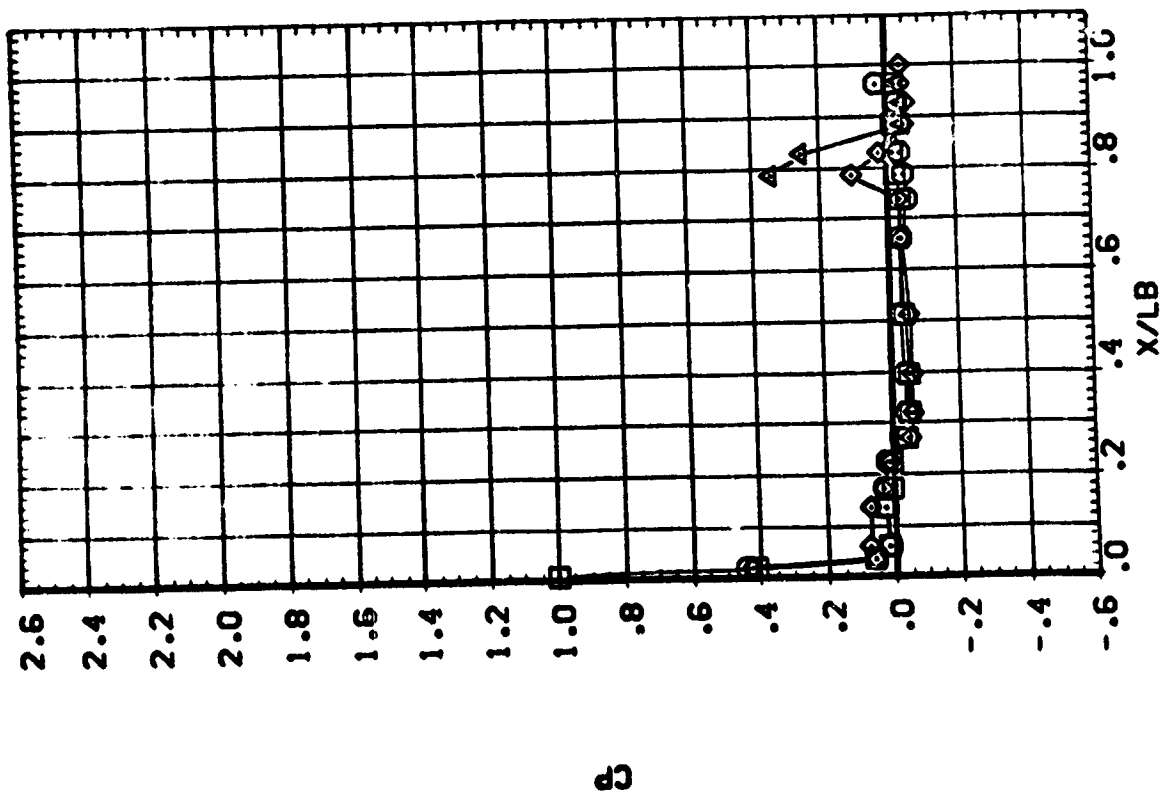
LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBQB11)

AMES 87-707 0A:2 02A

PARAMETRIC VALUES
 ALPHA .000 R₀ 000
 ELEVON -20.000 R₀ 010
 .000
 40.000

SYMB. P-1 BETA MACH
 70.000 6.530 3.502
 90.000
 170.000
 135.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

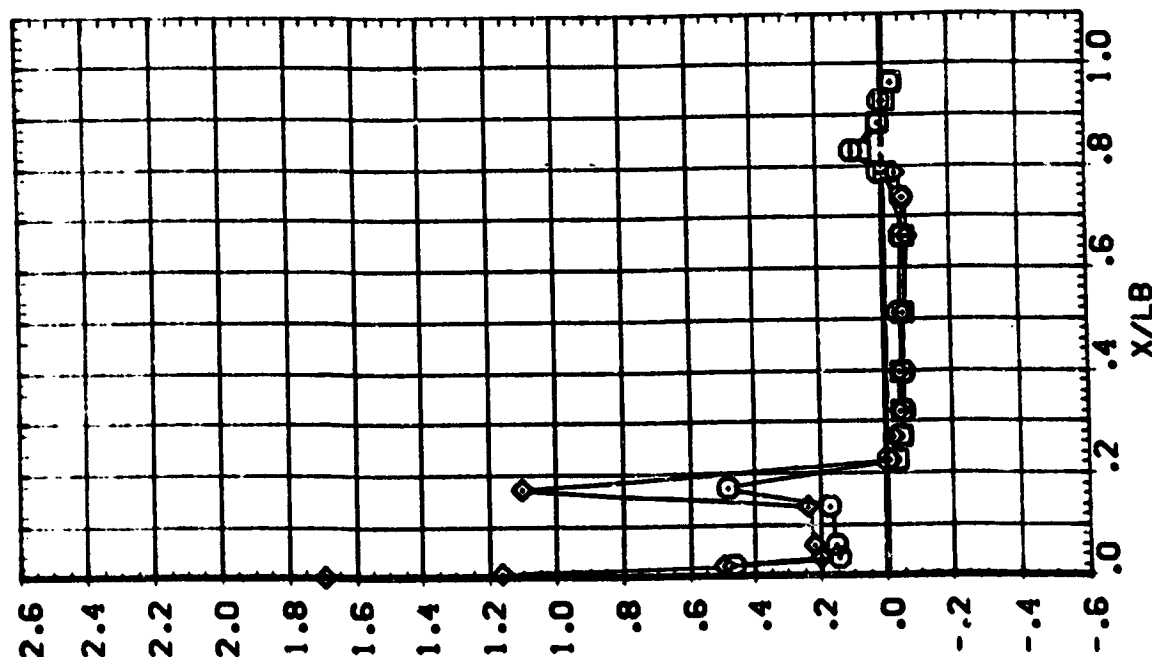
ORBITER FUSELAGE (R8QB11)

AVES 87-707 CA12 02A

PARAMETRIC VALUES
 .000 RUDDER
 -20.000 RUJFLR
 .000
 40.000

ALPHA
 ELEVON

SYMBOL
 :SC.000
 :65.000
 :80.000
 6.53C 3.527
 6.53C 3.527



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBQB14)

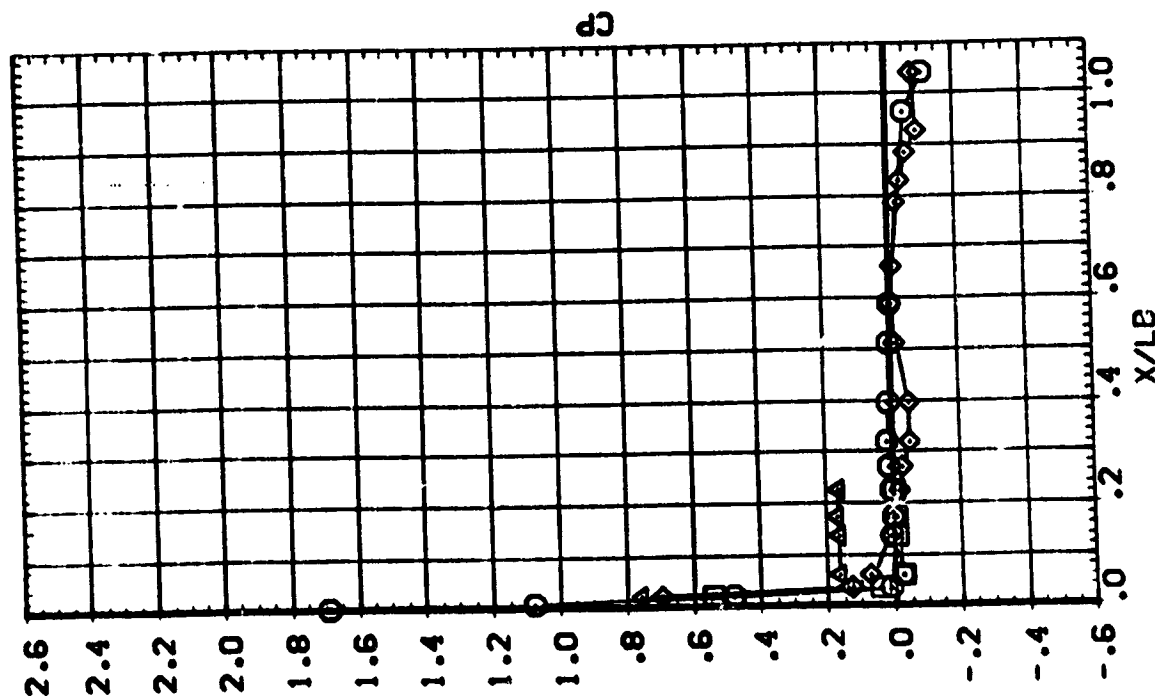
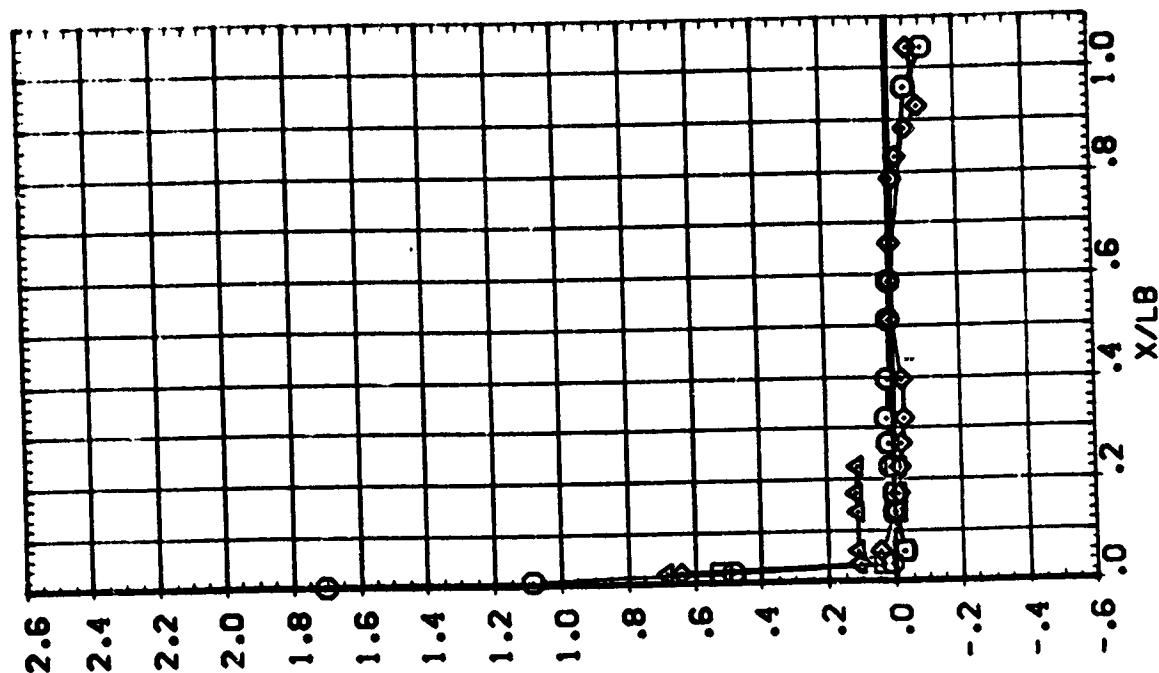
AVES 87-707 CA12 02A

PARAMETRIC VALUES
 ALPHA .000 R/OFLR .300
 ELEVON -40.000 R/OFLR 40.000

BE'A -6.440
 WACH 2.498

PHI .000
 20.000
 40.000
 55.000

SYMBOL
 ○ □ ◇ △



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBQB14)

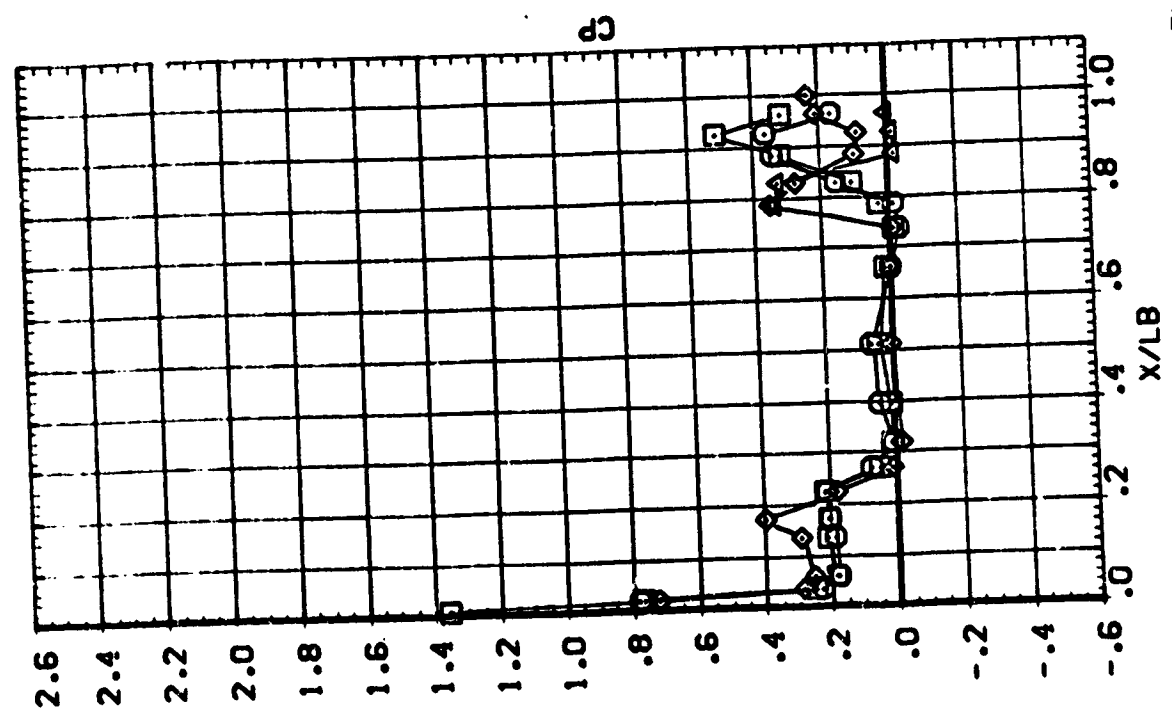
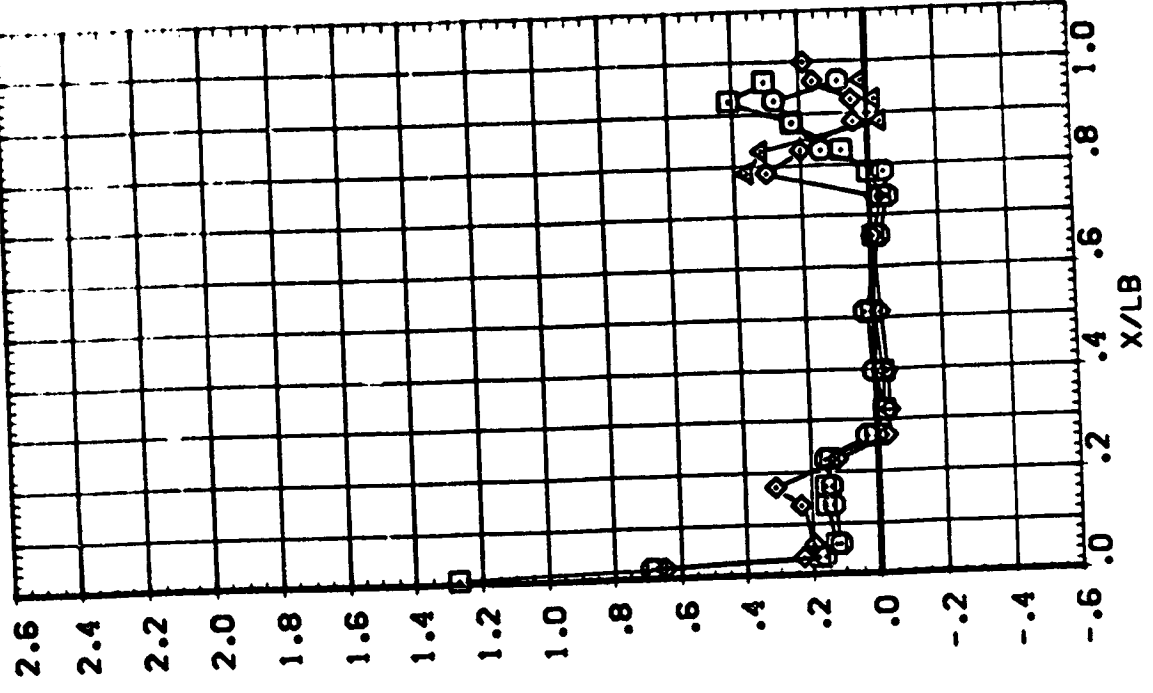
AVES 87-707 3A12 02A

SYNDC
 P-1
 70.000
 90.000
 120.000
 135.000

BETA
 -6.440
 3.300

MACH
 7.498

PARAMETRIC VALUES
 ALPHA
 ELEVON
 .000
 -45.000
 RUDER
 RUD L/R
 .000
 45.000



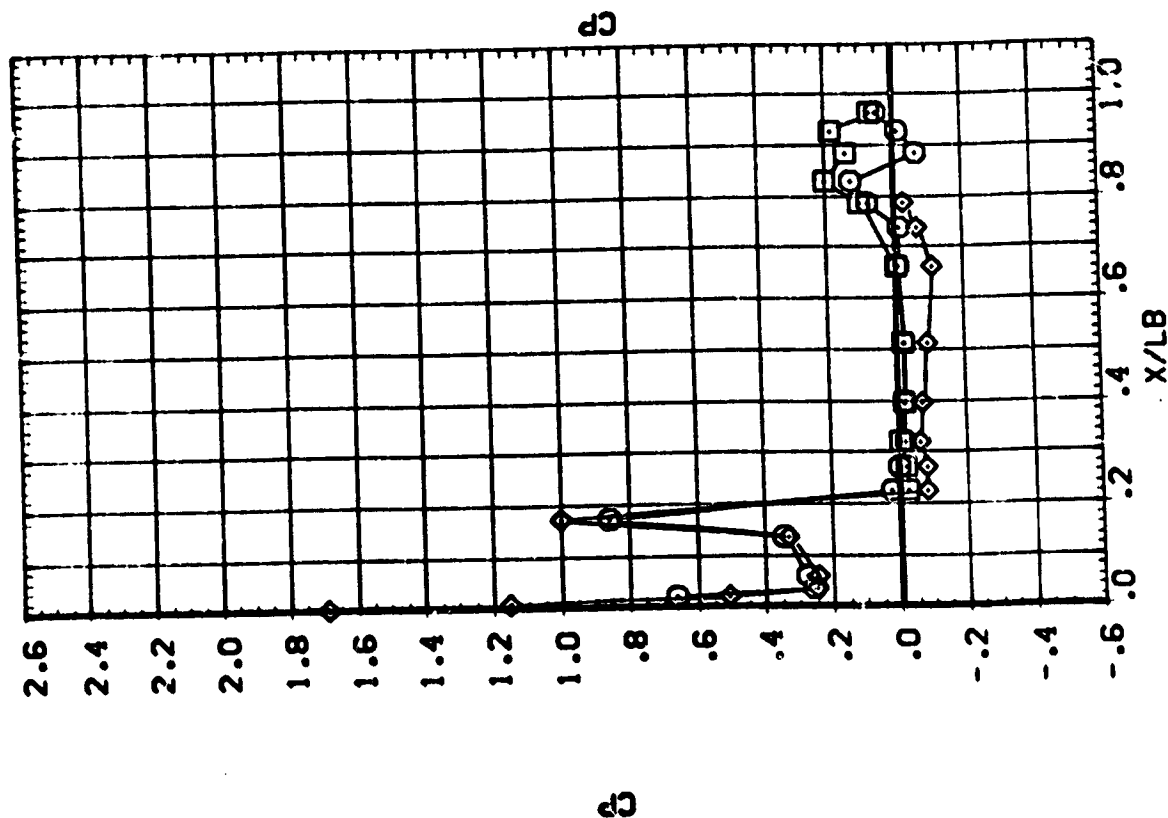
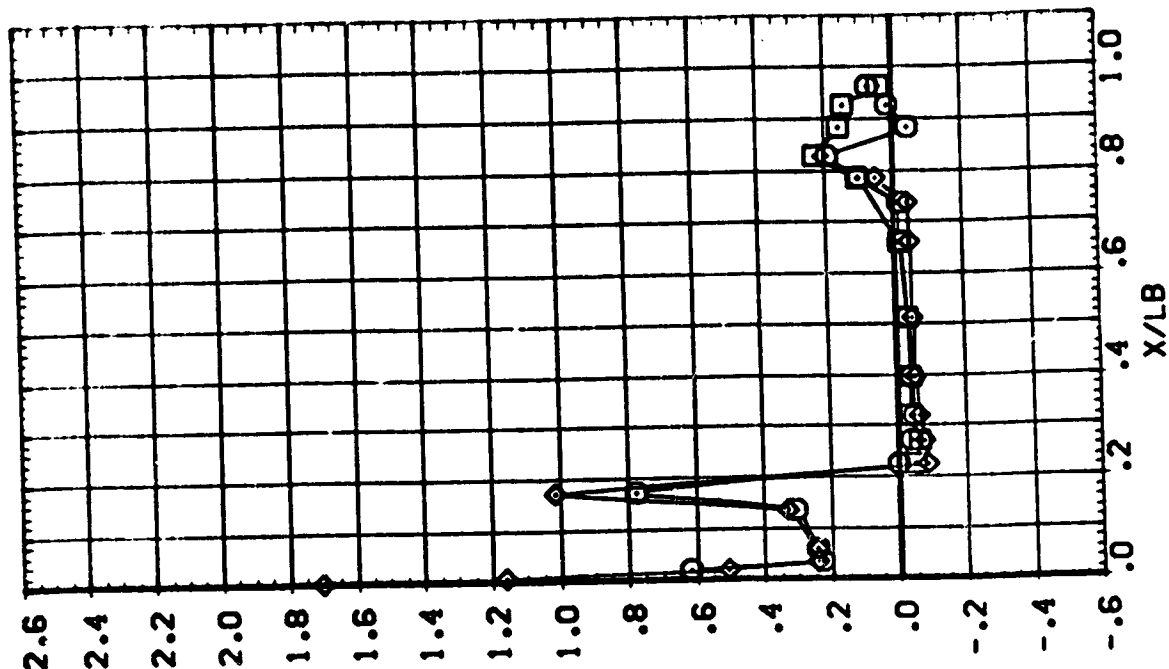
LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

CRBITER FUSELAGE (R80814)

PARAMETRIC VALUES
 .000 RJOER .000
 -40.000 RJOER 40.000
 ALPHA
 ELEVON

AVES 87-707 CA12 02A

SYNTH. DATA
 150.000 BETA 2.498
 65.000 -6.440
 80.000 -3.300



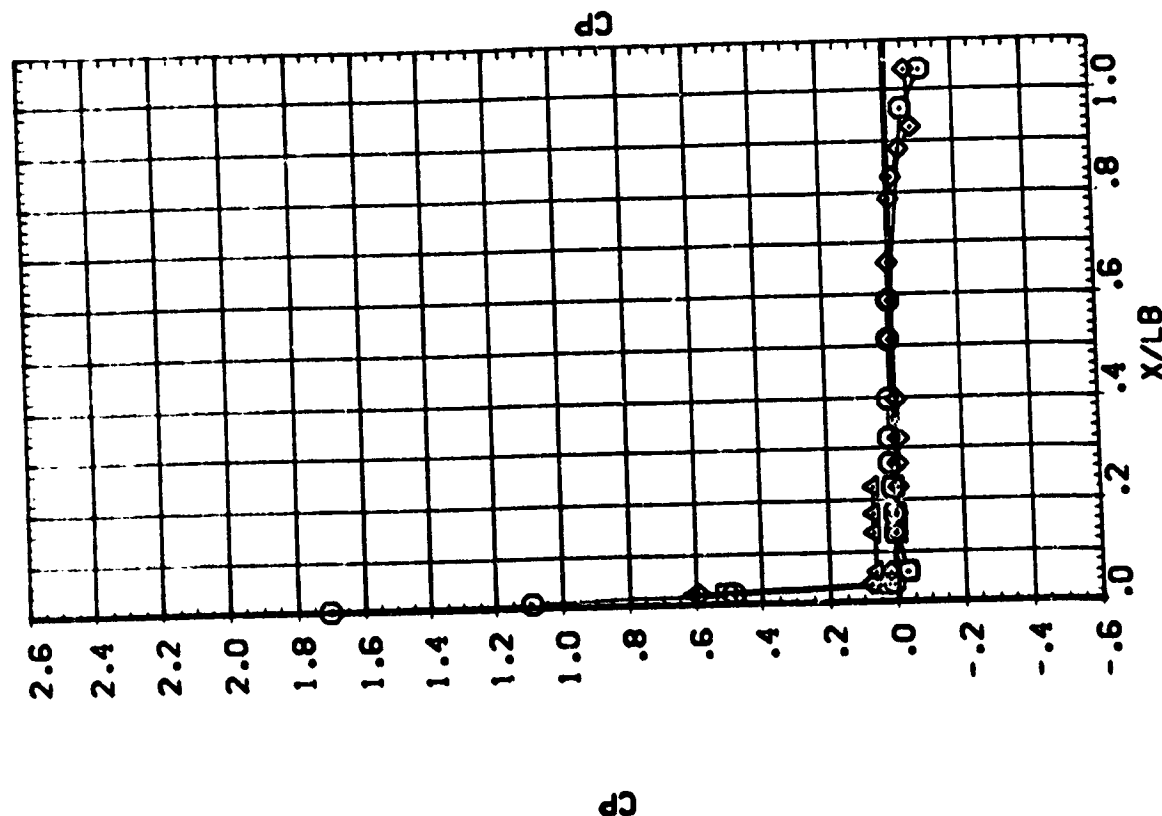
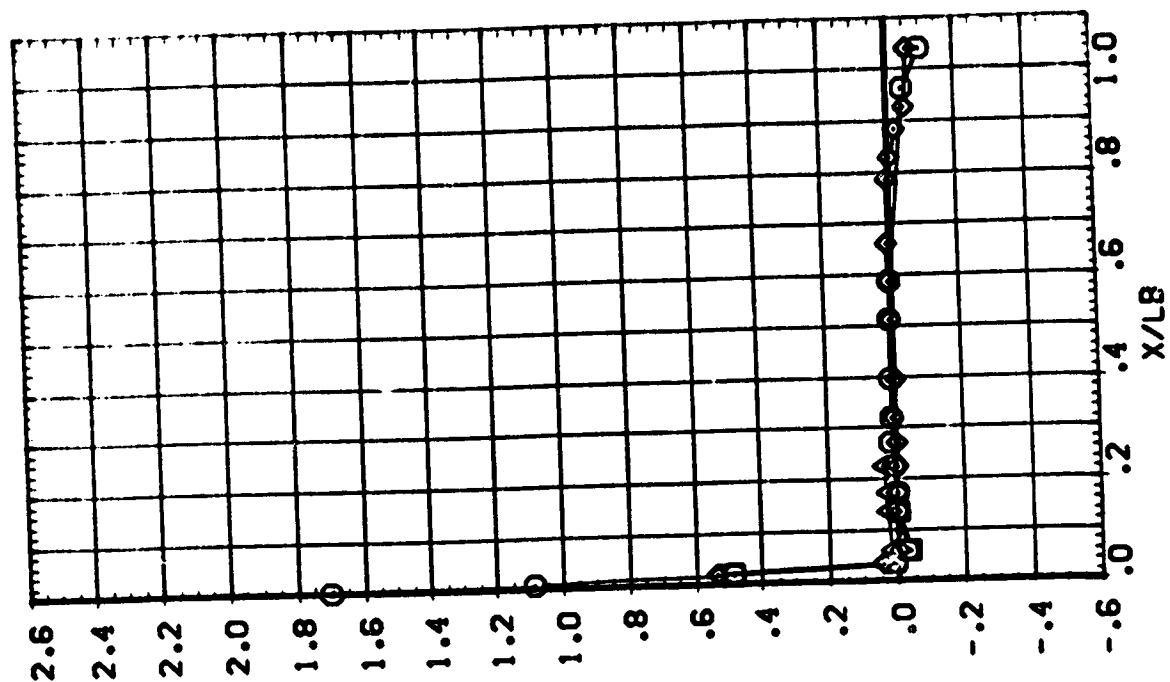
LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBCB:4)

AVES 87-7C7 CA:2 02A

PARAMETRIC VALUES
 ALPHA .000 RUDER .000
 ELEVON -40.000 ROLF R 40.000

SYMBOL PH: BETA WACH
 .000 .000 2.498
 20.000 3.050
 40.000
 55.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

III

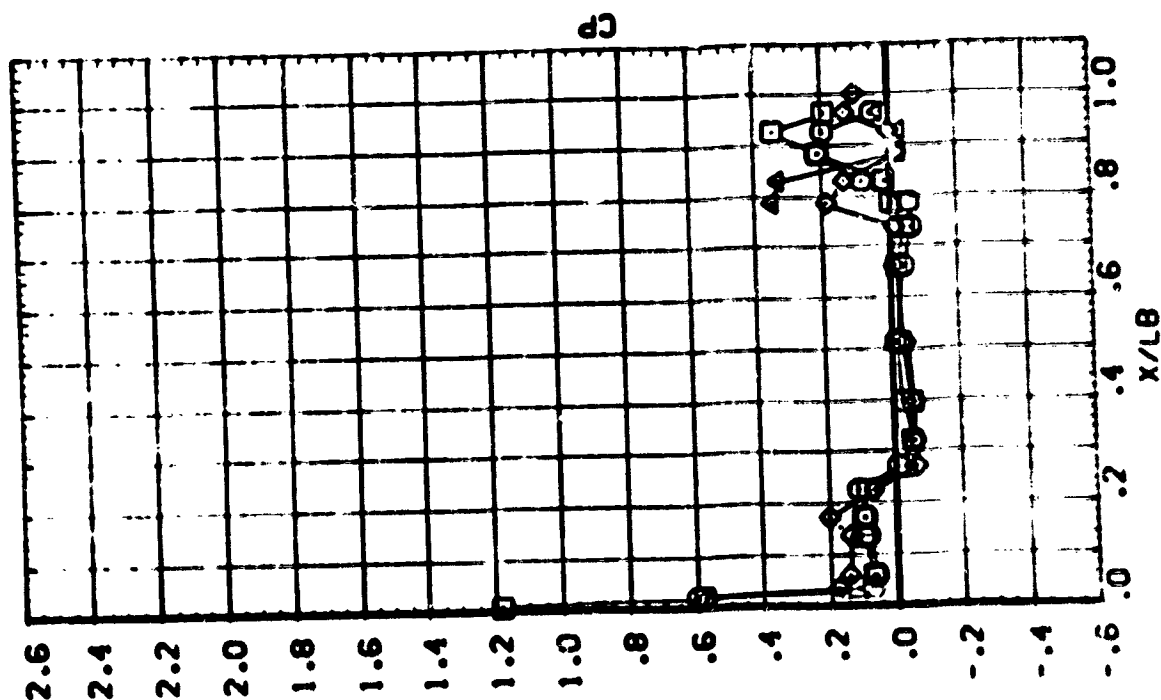
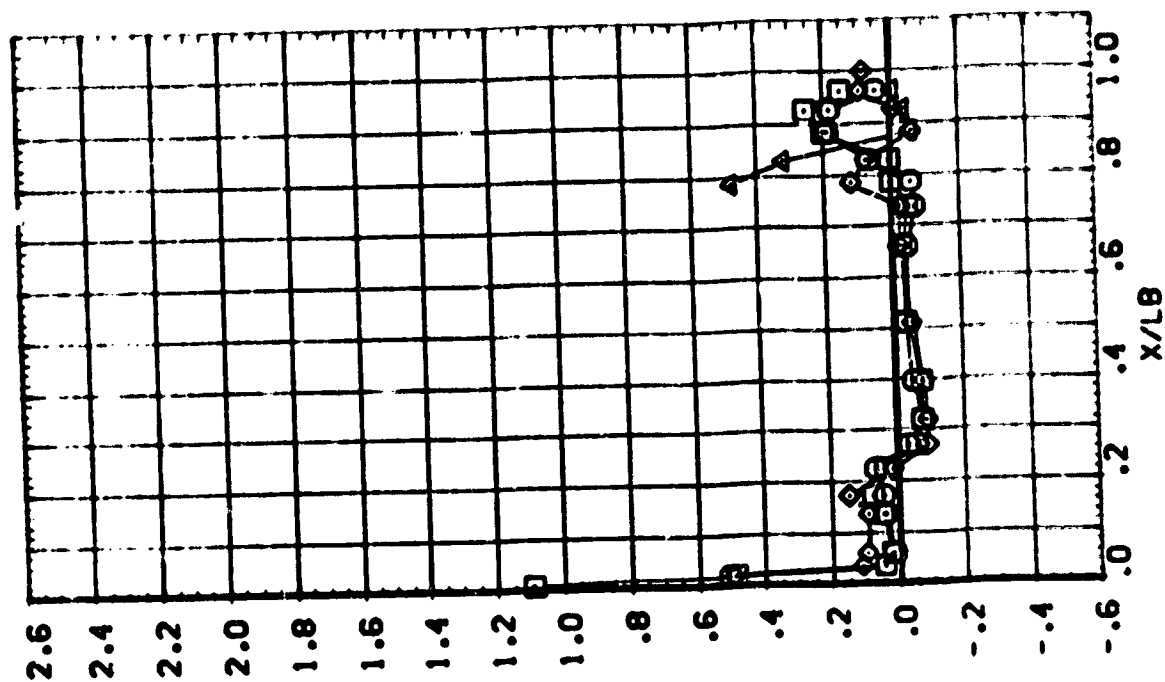
ORBITER FUSELAGE (RBC2:4)

AVES 87-7C7 CA:2 C2A

PARAMETRIC VALUES
 ALPHA .000
 ELEVON -45.000
 ROLLER .000
 RDTLR 43.000

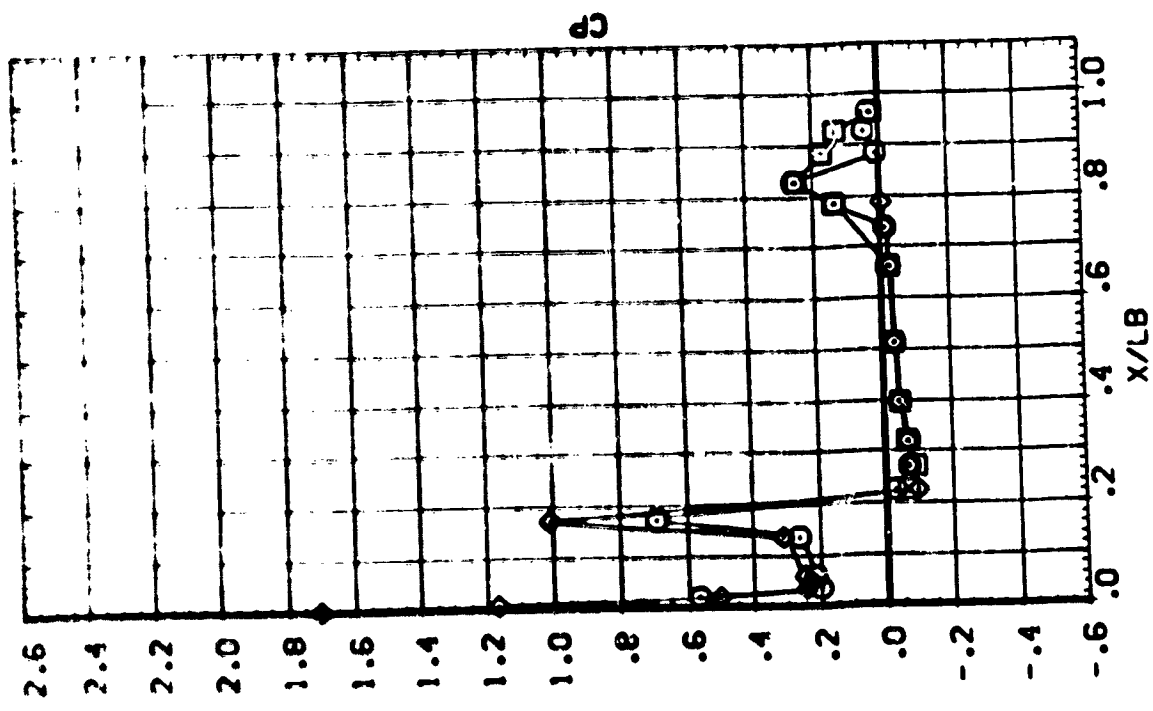
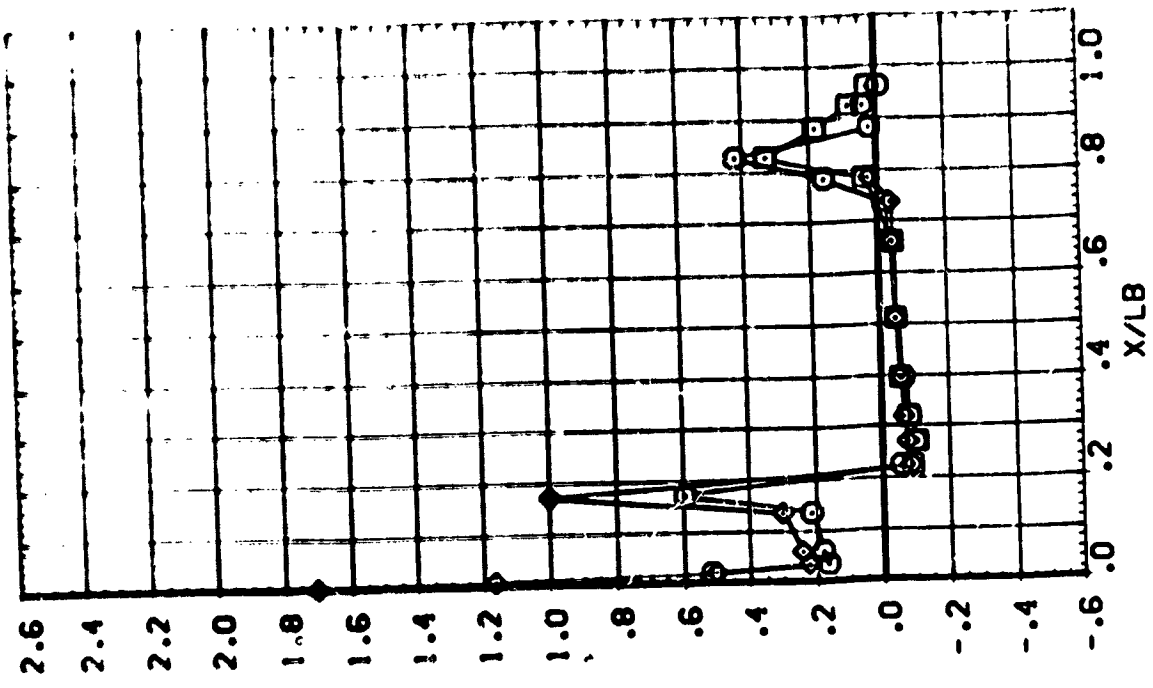
SYMBOL
 ()
 O
 A

SE-A .0173
 WAC- 7.498
 70.000
 90.000
 170.000
 175.000



21000 10.0 10.45
 1.00 10.00 10.00
 10.00 10.00 10.00

1.00 10.00 10.00
 1.00 10.00 10.00
 1.00 10.00 10.00



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

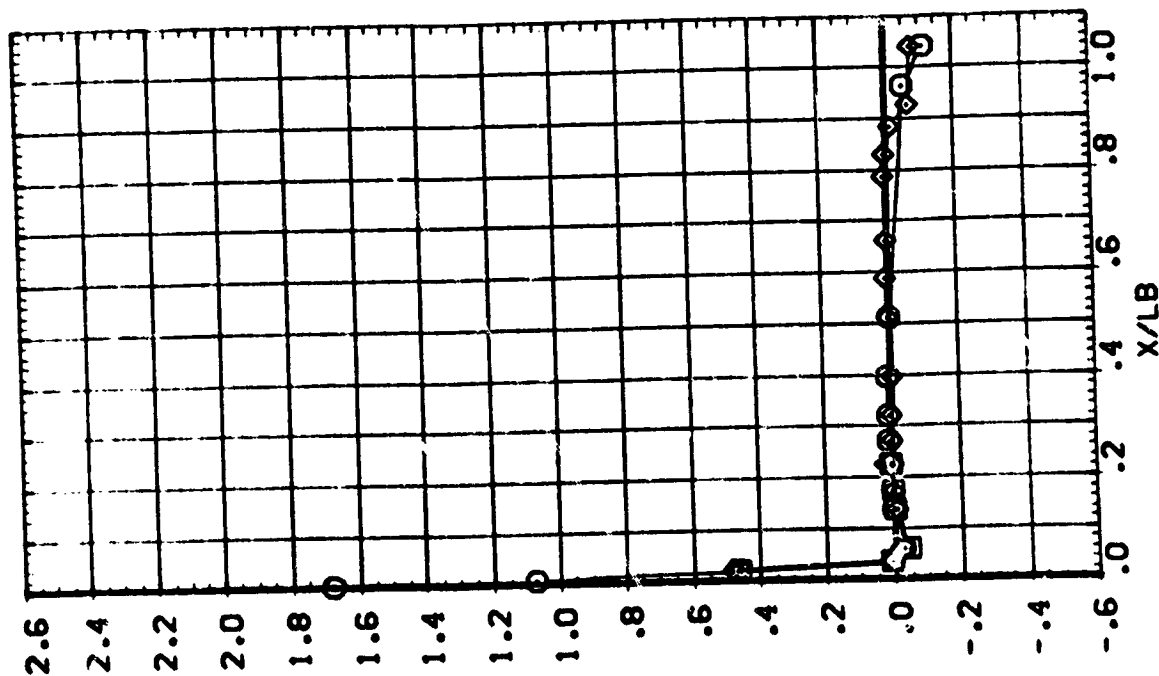
ORBITER FUSELAGE (R80814)

ANES 87-707 3A12 02A

SYMBOL
 P-1
 .000
 20.000
 40.000
 55.000

BE'A 6.290
 VACH 2.498

PARAMETRIC VALUES
 ALPHA .000
 ELEVON -40.000
 RUDDER .000
 RUDDER 40.000



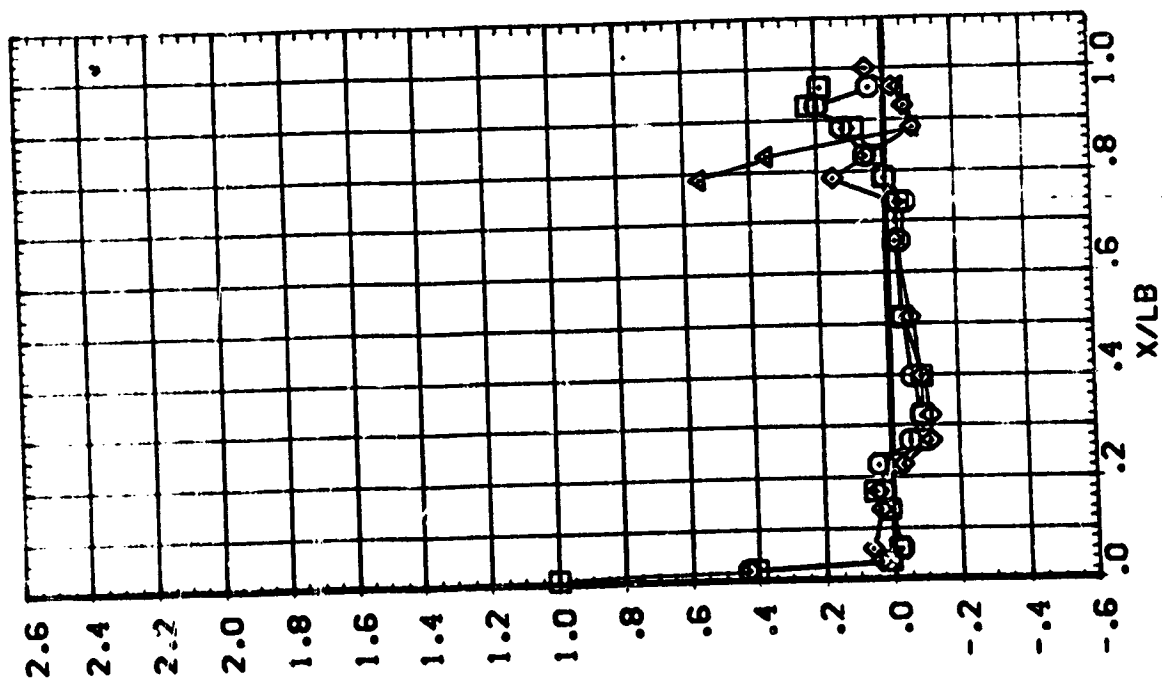
LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

PARAMETRIC VALUES
R.D.D. .000
R.D.D. .000
R.D.D. .000

SYMBOL
O
□
△

BEYA 6.290
WAC 2.498

ALPHA
ELEVON



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

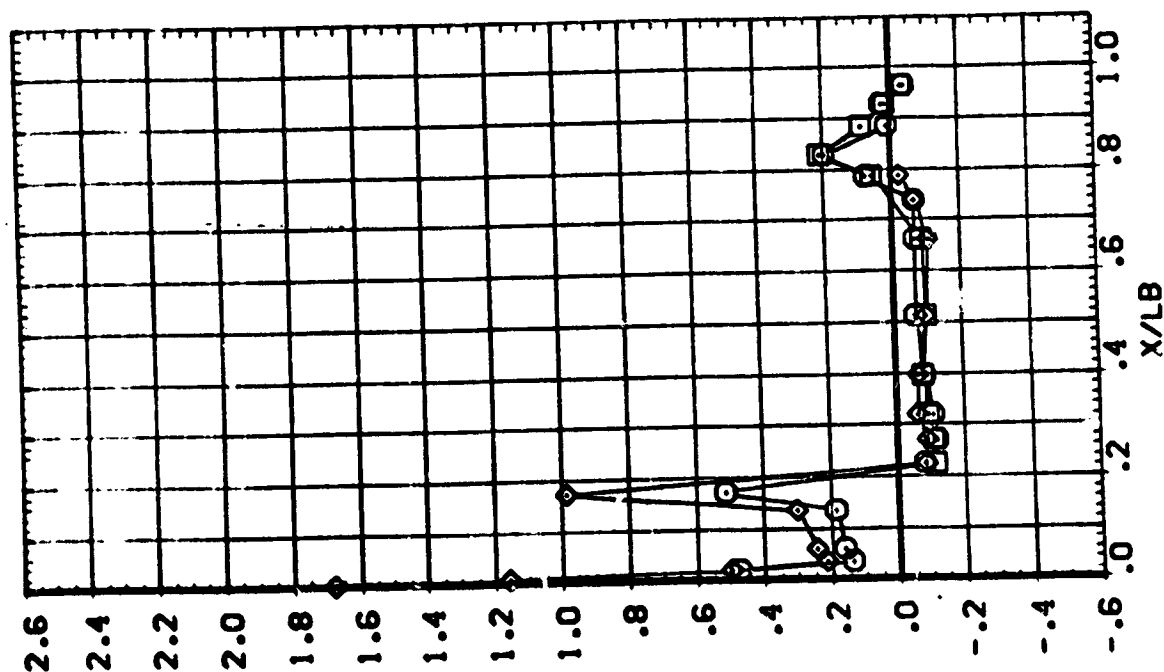


AMES 87-707 0A12 C2A CRBITER FUSELAGE (R80B14)

SYMBOL
□
○
◇

ALPHA: 50.000
ELEVON: 65.000
RJD: 80.000
BETA: 6.790
MACH: 7.498

PARAMETRIC VALUES
ALPHA: .000
ELEVON: -40.000
RJD: .000
RJD: 40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBGB14)

AVES 87-707 CA12 C2A

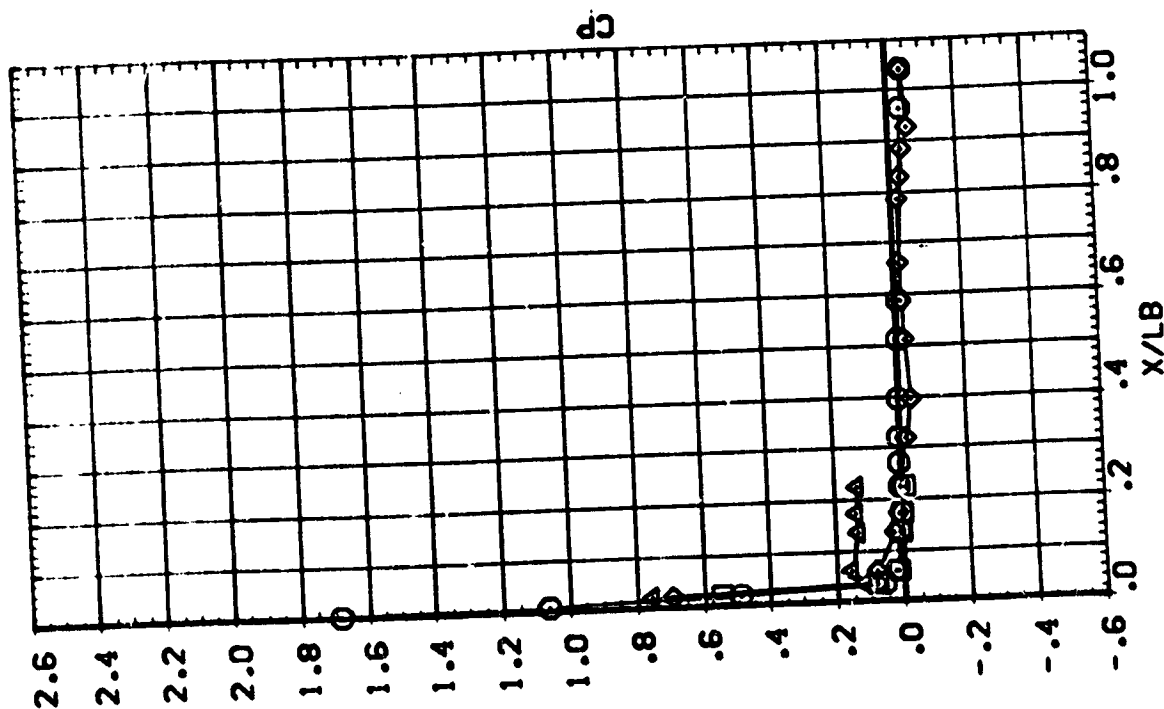
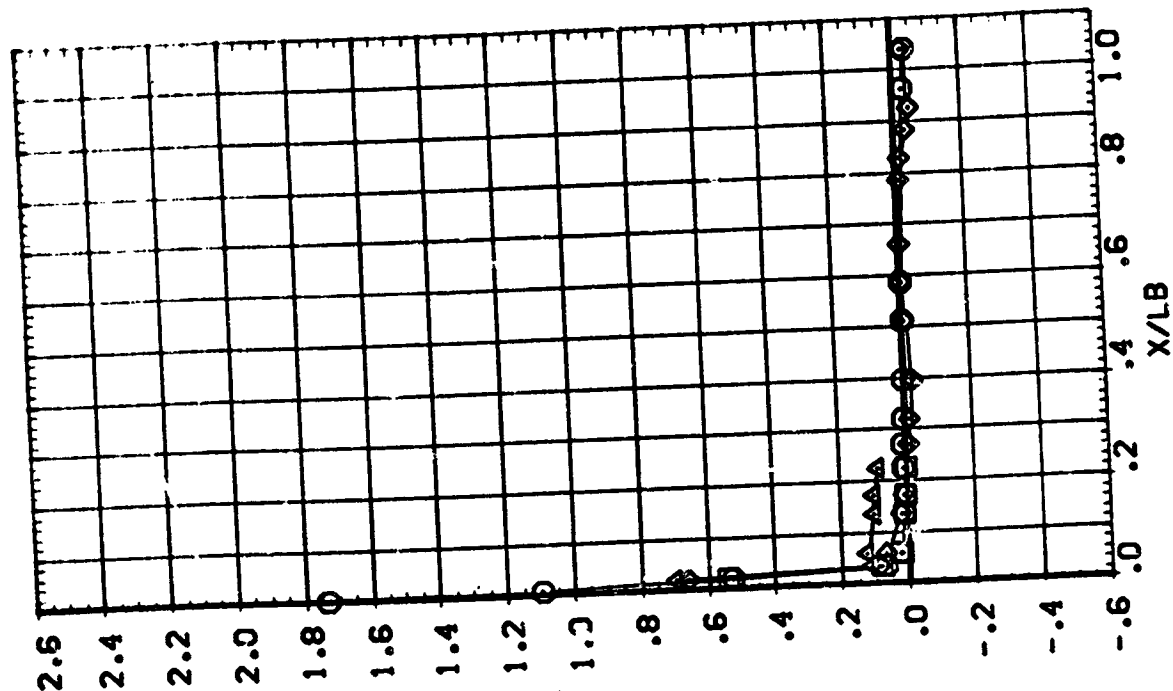
SYMBOL
○ ○ ○ ○
◇
△

PHI .000
70.000
40.000
55.000

BE'A -6.670
3.470

MACH 3.503

PARAMETRIC VALUES
RORDER .000
ROR R .000
ELEVON -40.000
ROR R 40.000



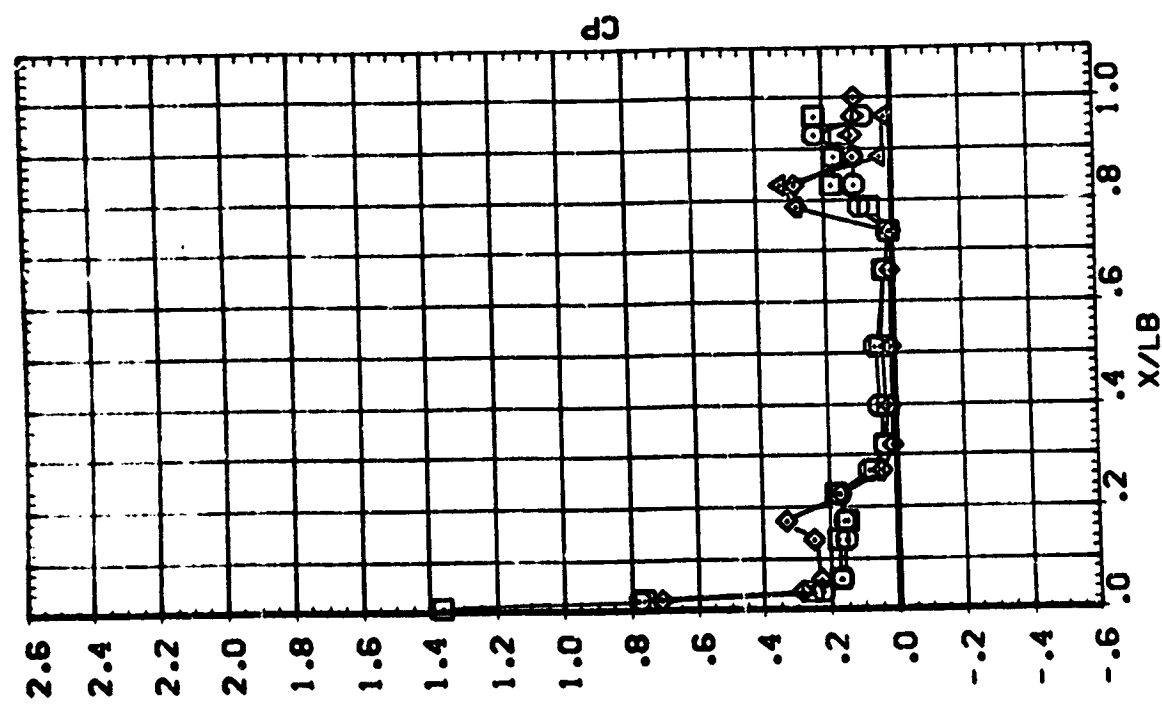
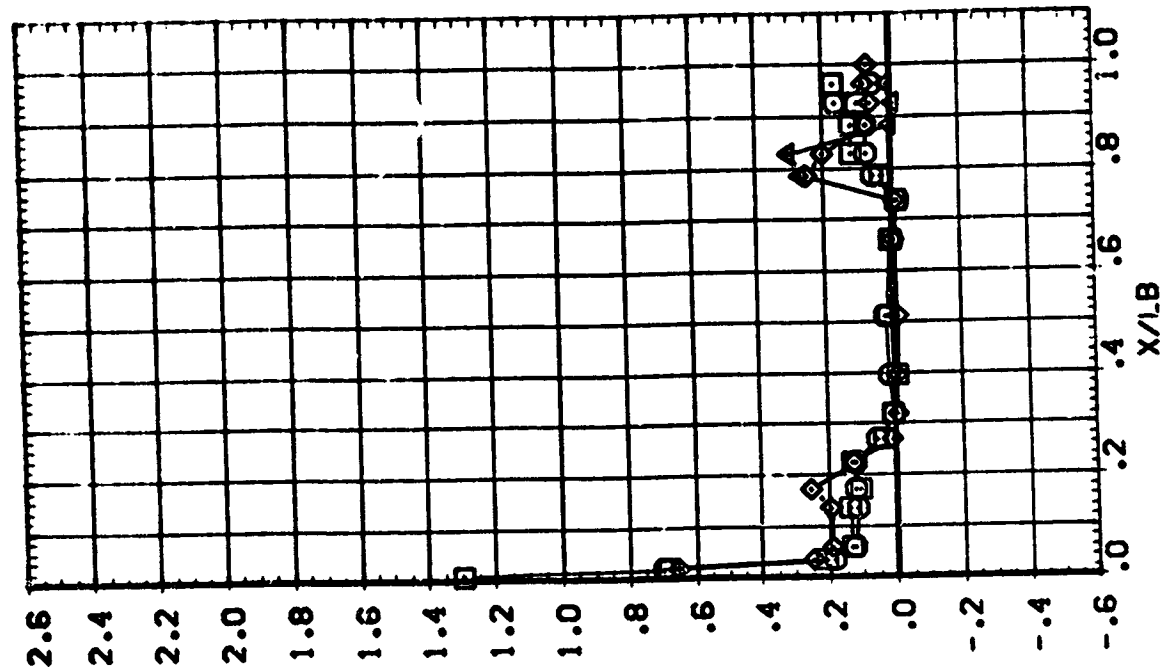
LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (R80314)

AVES 87-707 JAI2 C2A

PARAMETRIC VALUES
 ALPHA .000
 ELEVON -40.000
 ROLLER .000
 ROLLER 40.000

SYMBOL
 P.I.
 70.000
 90.000
 170.000
 35.000
 MACH
 3.503
 3.420



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBQB14)

32A

AVES 87-707 CA:2

SYMBOL
 ○
 □
 ◇

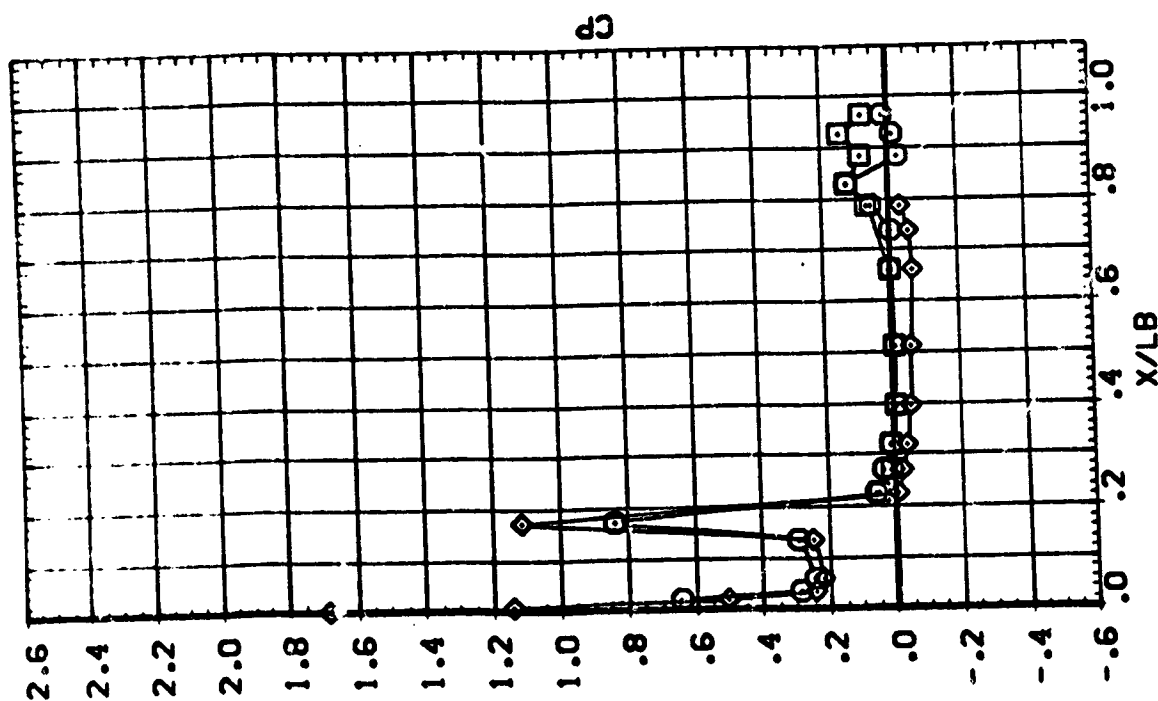
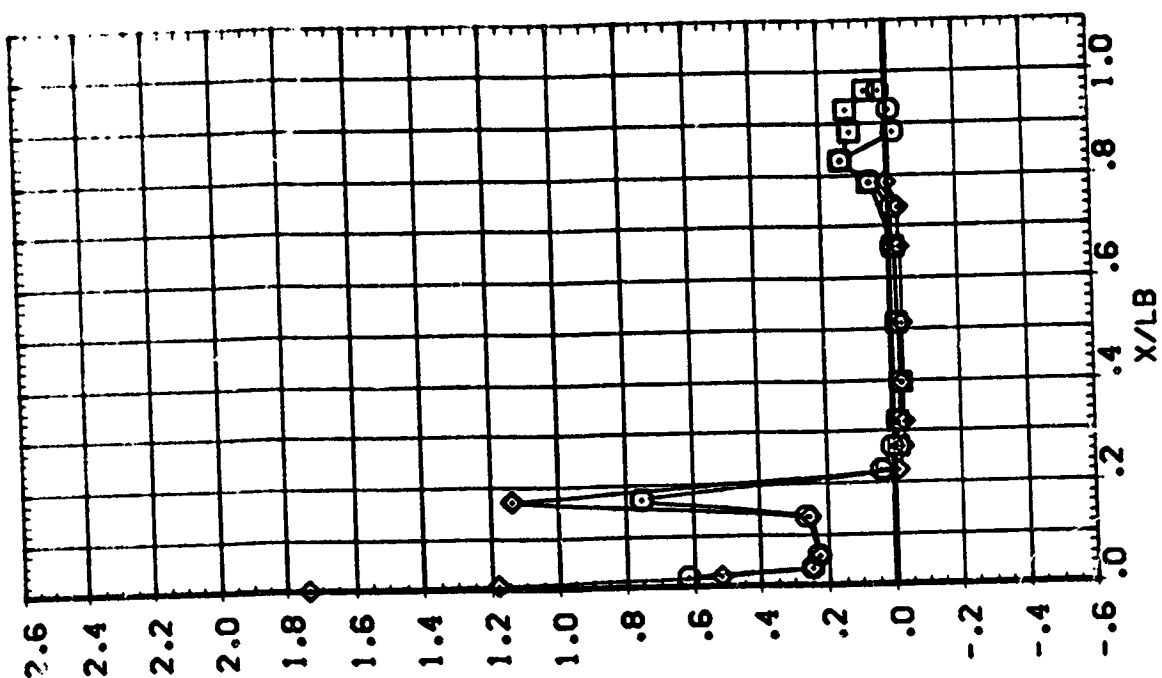
WAC
 50.000
 65.000
 80.000

BETA
 -6.670
 -3.470

WAC
 3.503

ALPHA
 ELEVON

PARAMETRIC VALUES
 .000 RUDER
 -40.000 RUDER
 .000
 40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (RBQB14)

AVES 87-707 CA12 02A

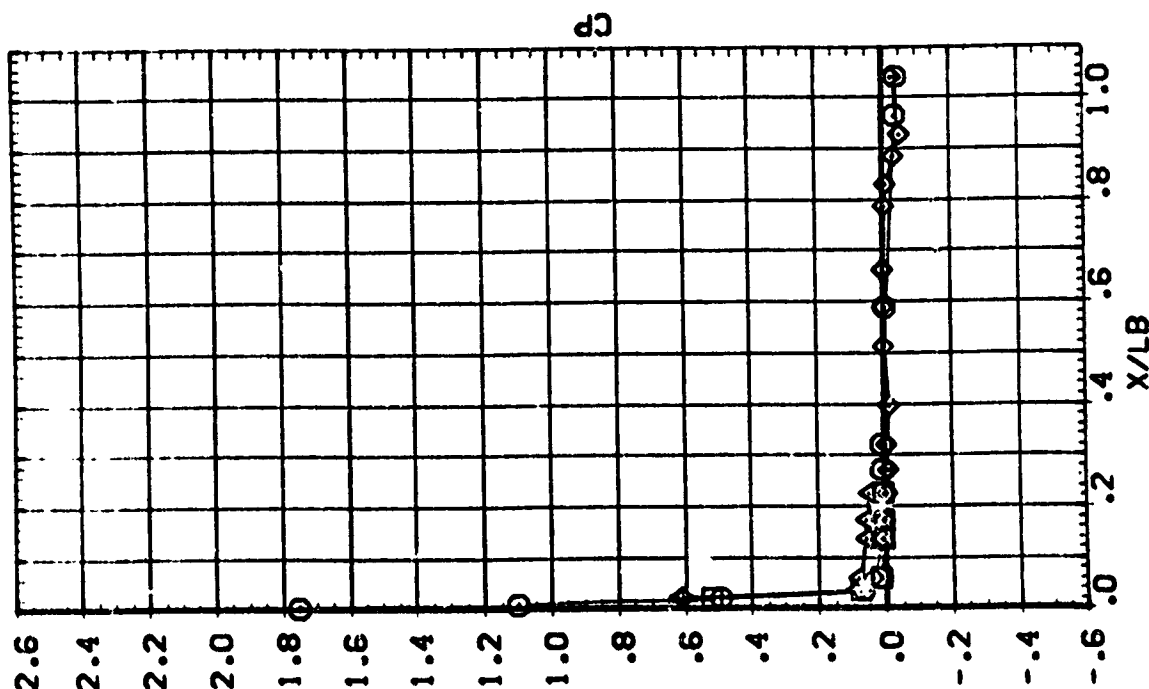
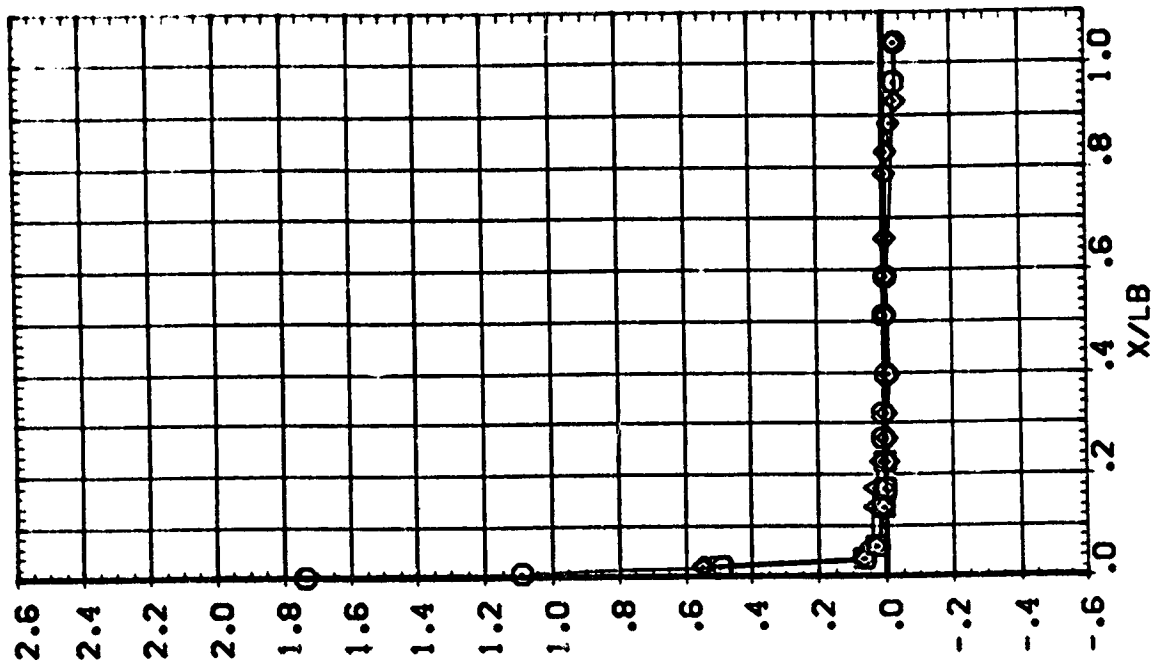
PARAMETRIC VALUES
 .000 RUDER .000
 -40.000 RUDFLR 40.000

ALPHA
 ELEVON

SYMBOL
 ○ .000
 ◇ 20.000
 △ 40.000
 55.000

BETA
 1.170
 3.180

WACH
 3.503



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

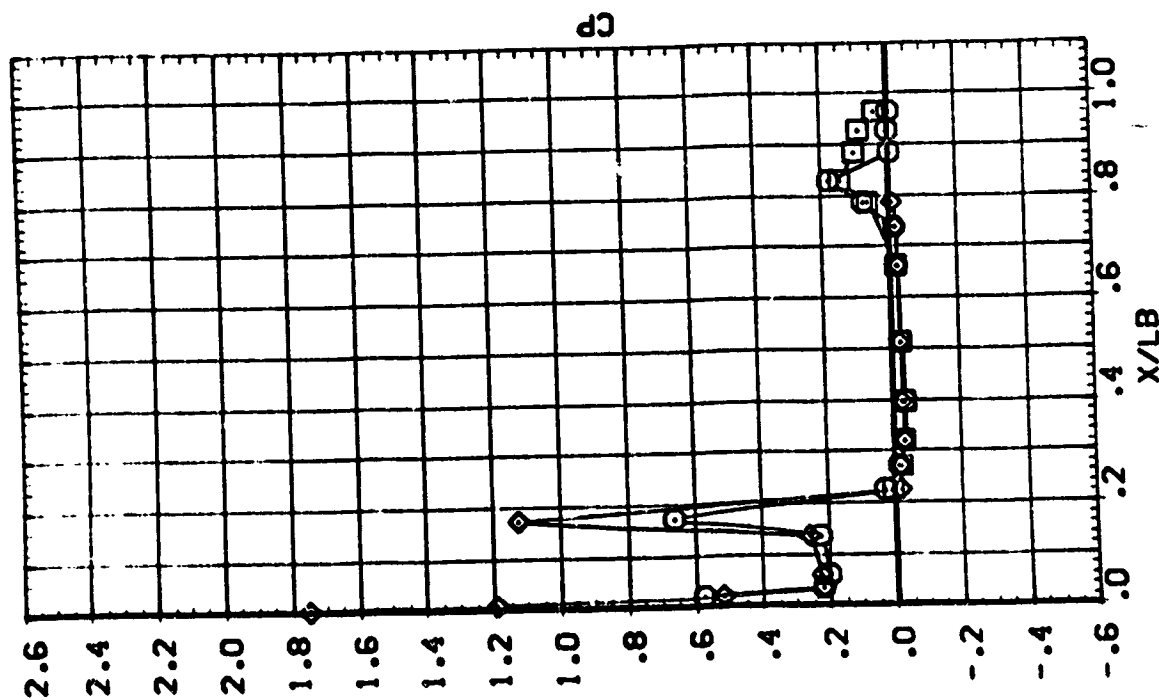
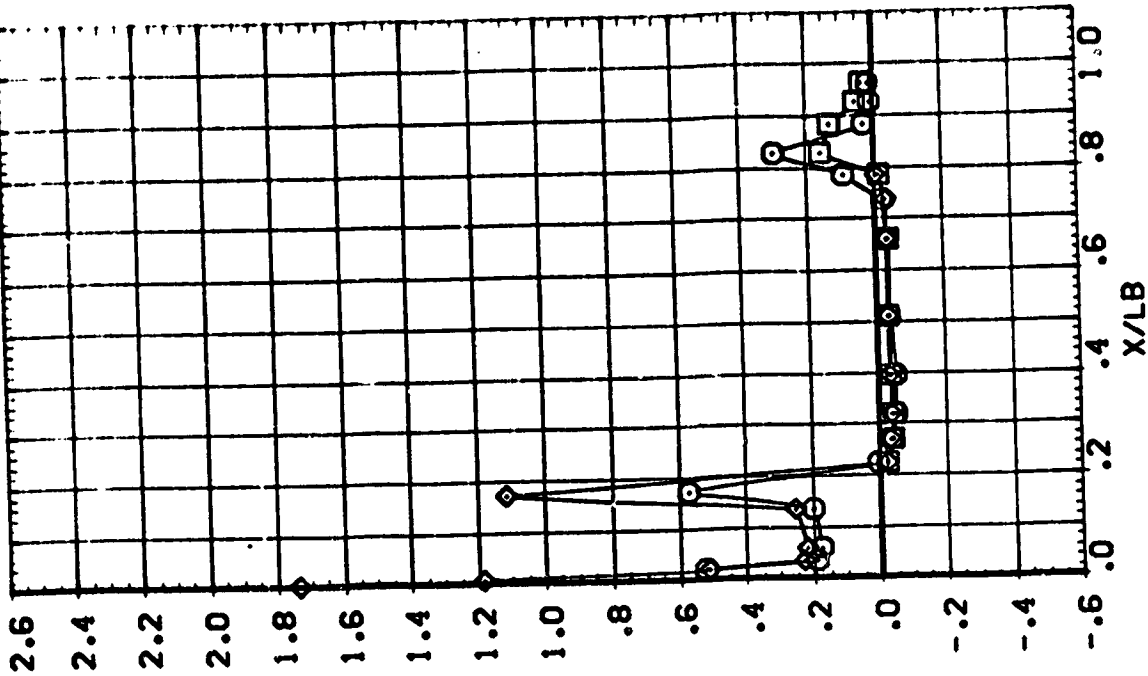
ORBITER FUSELAGE (R80814)

AVES 87-707 CA:2 C2A

SYBC
O
◇

PA: 150.000
160.000
180.000
EF: A 1.70 3.180
WACH 3.503

PARAMETRIC VALUES
ALPHA .000 RUDER .000
ELEVON -40.000 RUDFLR 40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

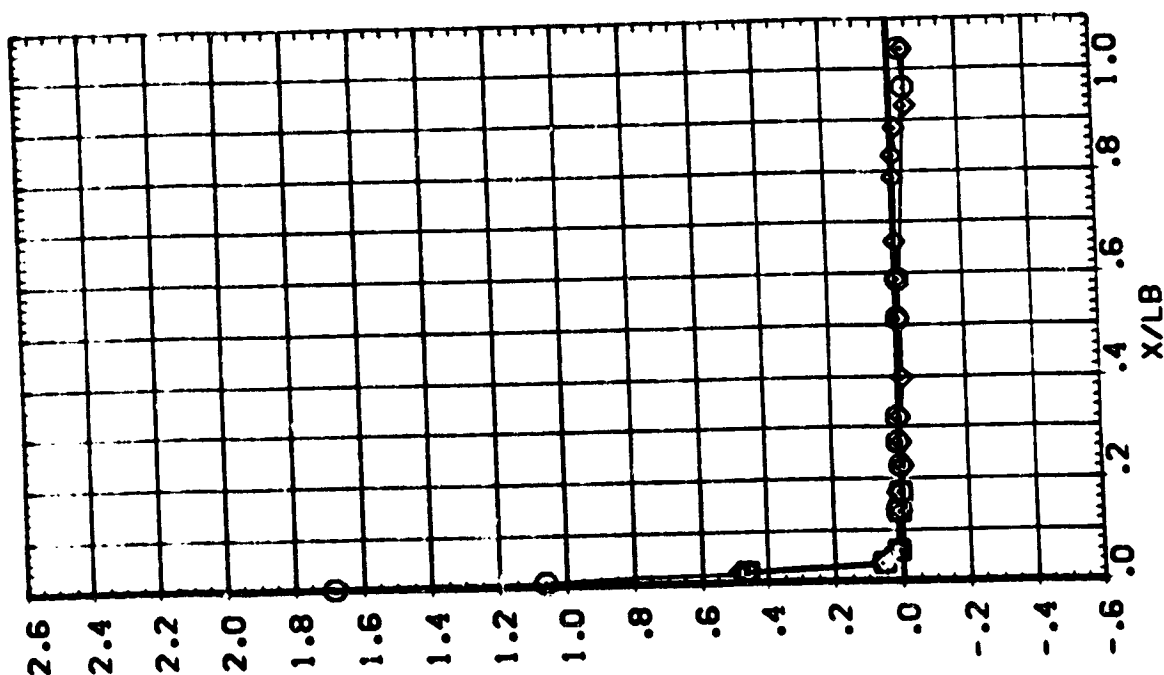
ORBITER FUSELAGE (RBQB14)

AVES 87-707 CA:2 C2A

SYBC: .000
70.000
40.000
55.000

BE'A 6.57C MACH 3.503

PARAMETRIC VALUES
ALPHA .000
ELEVON -40.000
RODER .000
RDR LR 40.000



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (R80814)

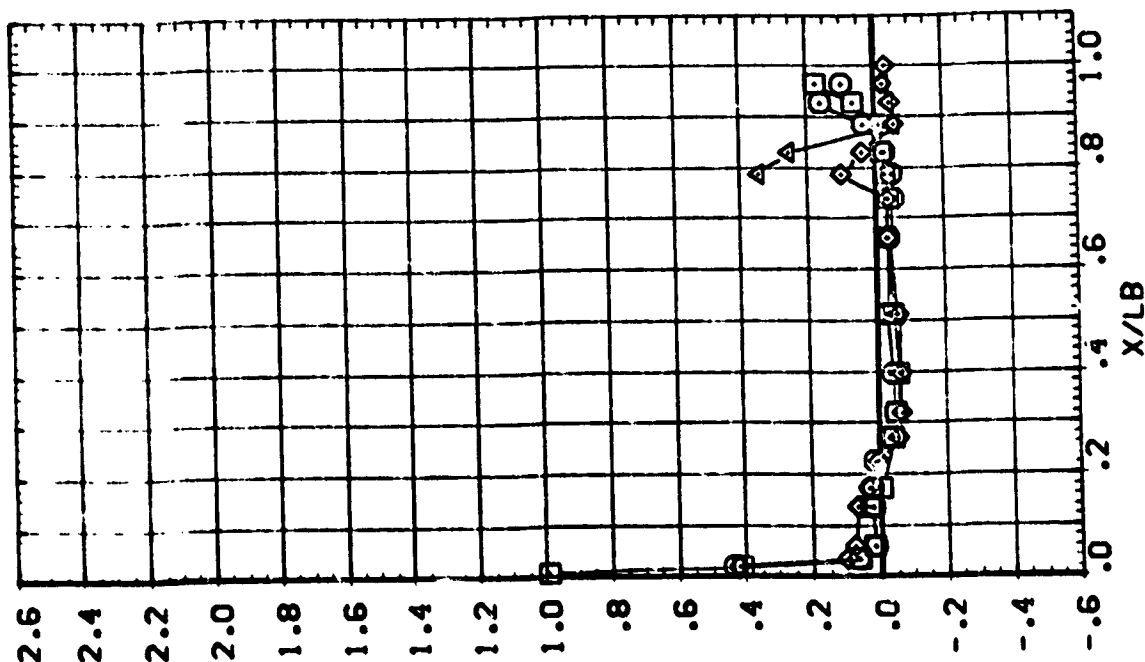
AVES 87-707 CA:2 C2A

PARAMETRIC VALUES
 .000 RLODR
 -40.000 RLOTR
 .000
 40.000

ALPHA
 ELEVON

SYNCH
 75.000
 90.000
 120.000
 135.000

35.70 3.503



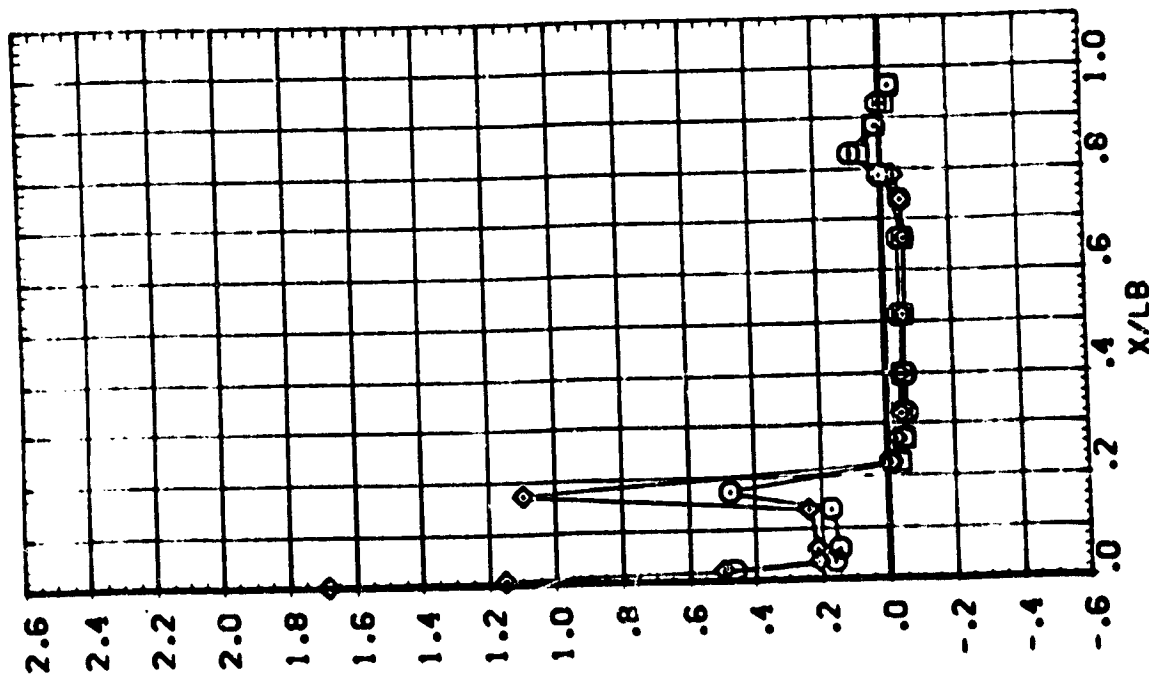
LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

ORBITER FUSELAGE (R30314)

AVES 87-707 CA12 C2A

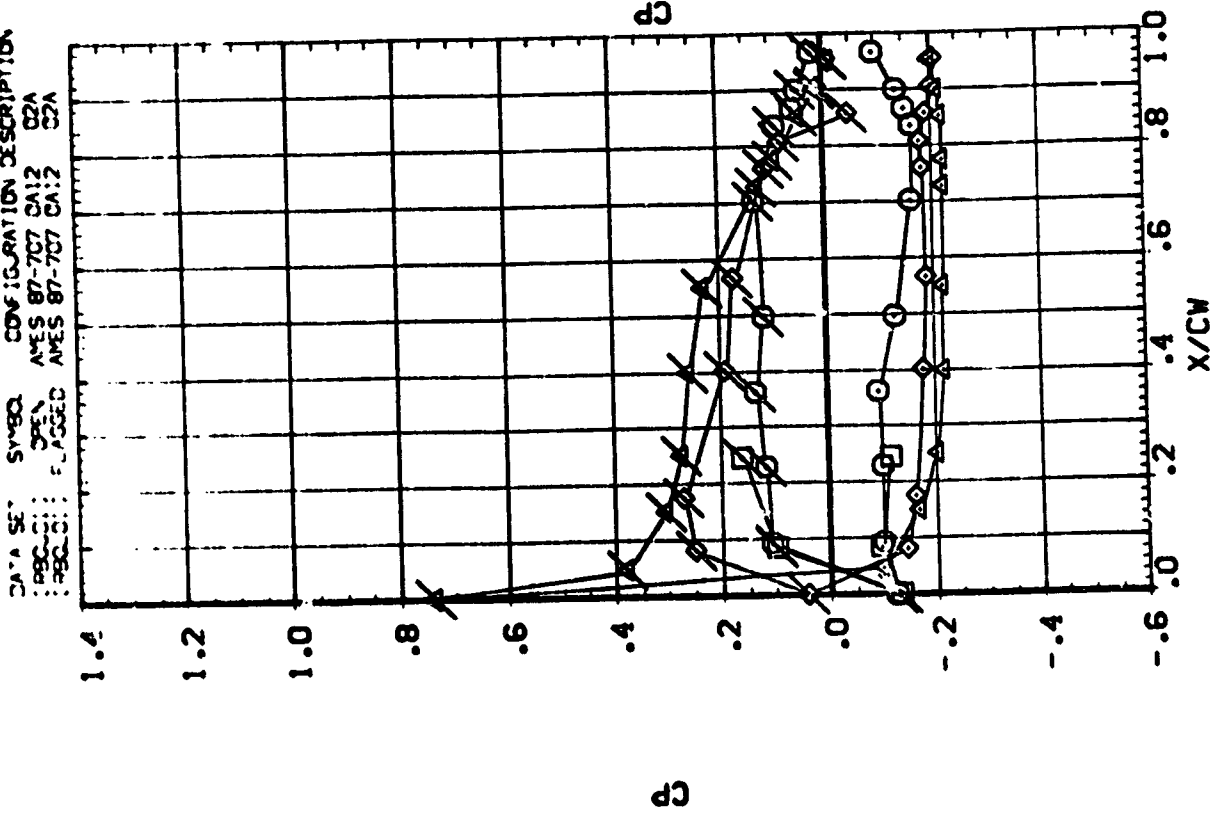
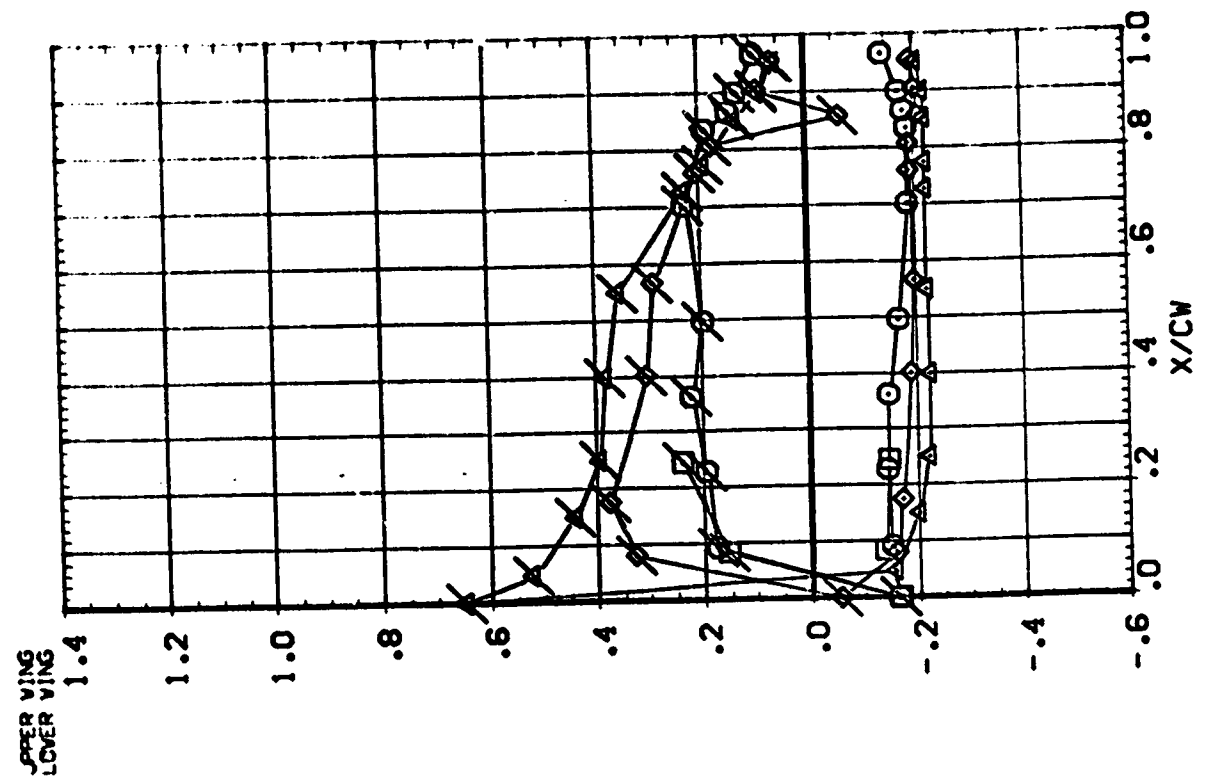
PARAMETRIC VALUES
 ALPHA .000
 ELEVATION -40.000
 RADIUS 40.000

SYMBOL
 ()
 ()
 ()



LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES

PARAMETRIC VALUES
 BET1 .000 RUDER .000
 ELEVON .000 RUDLR 40.000



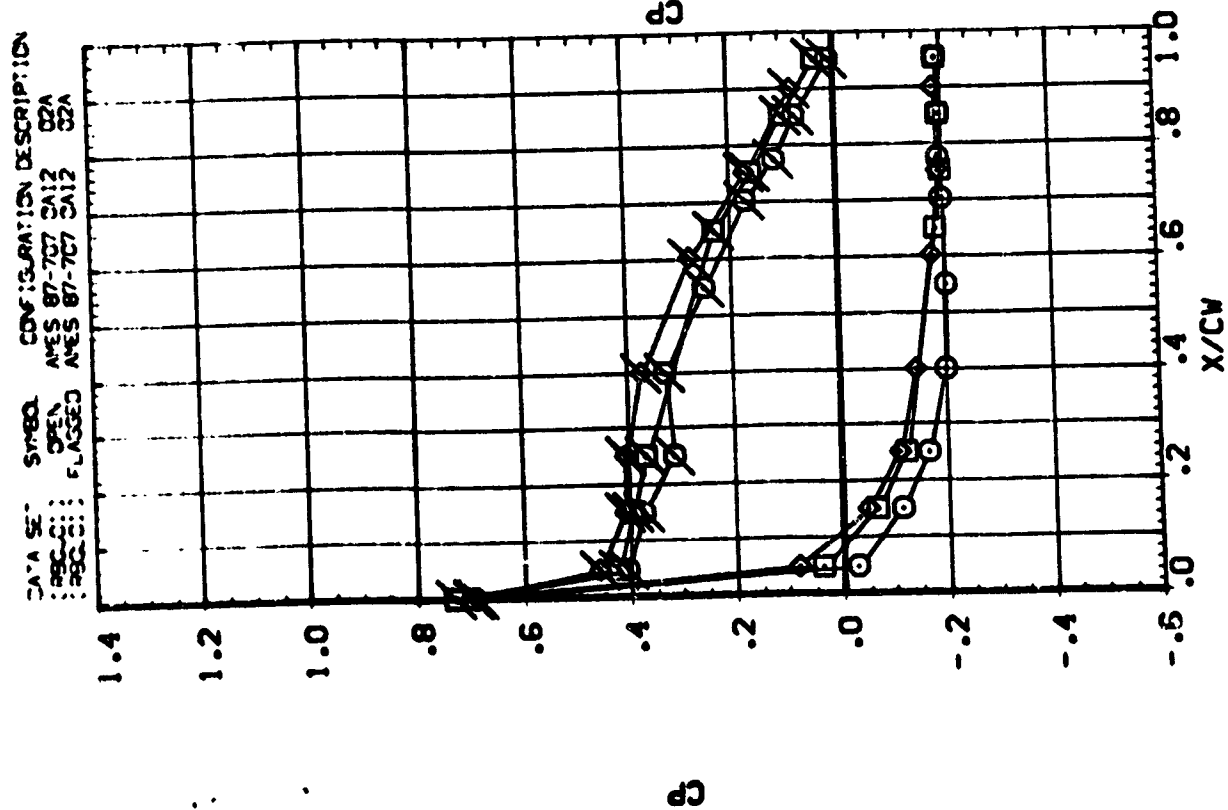
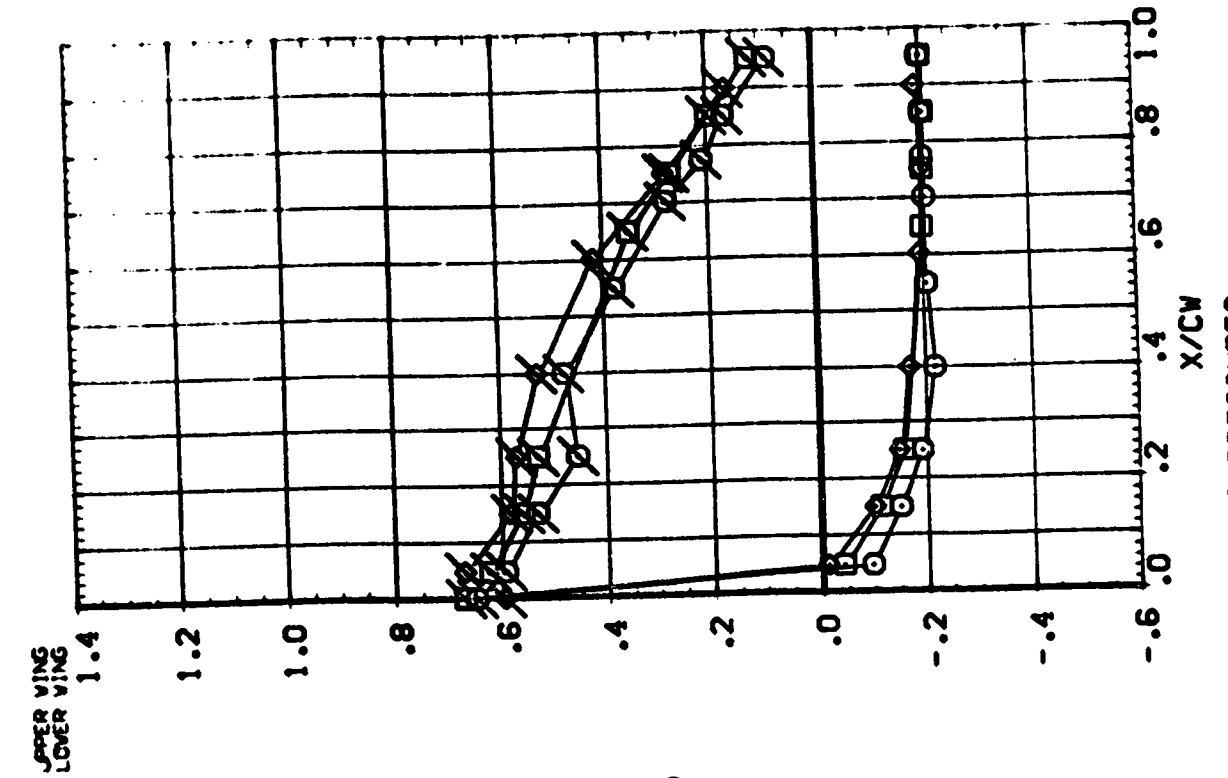
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 :PBC-1 OPEN AMES 87-707 CA12 C2A
 :PBC-2 FLAGGED AMES 87-707 CA12 C2A

SYMBOLS
 ()
 O
 Δ

ALPHA 9.97C 2.498
 VIB 0.299
 .364
 .477
 .534

CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 BETA .000
 ELEVON .000
 RUDER .000
 RUDER 40.000

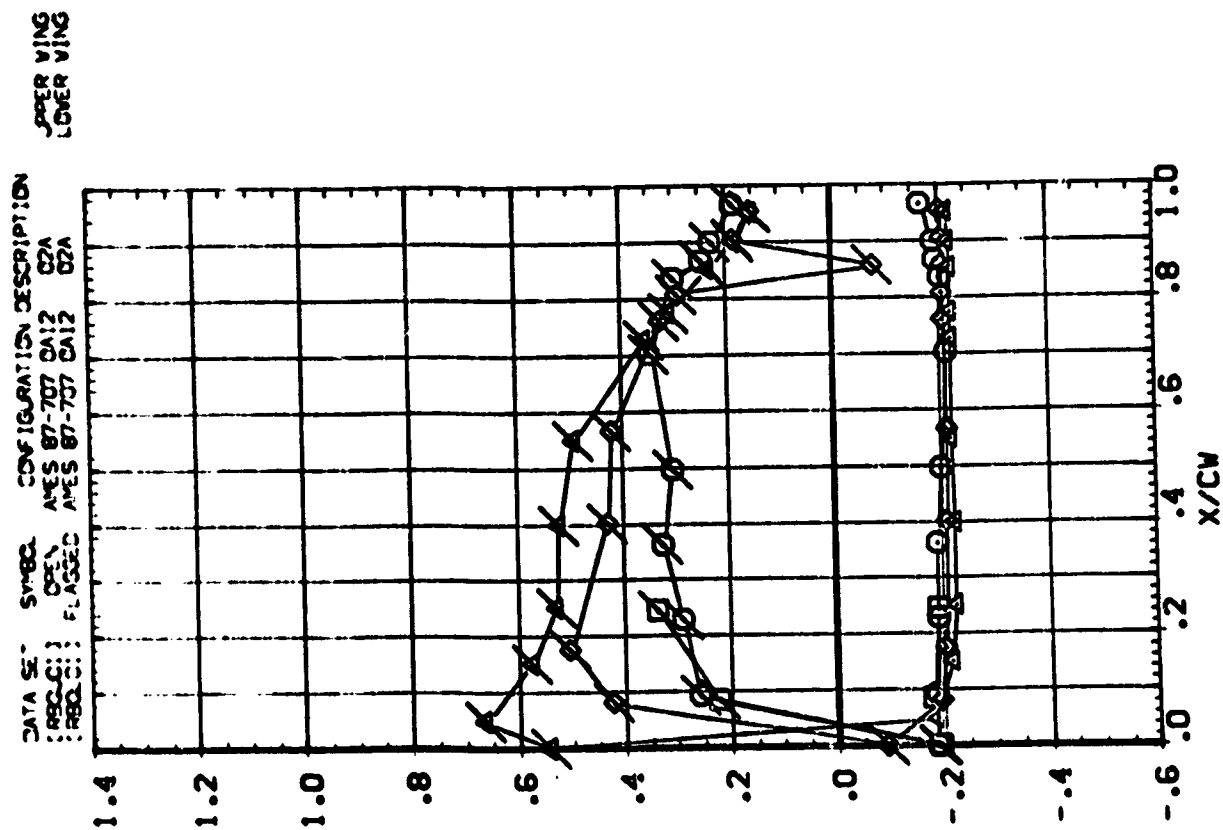


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAME'NIF V.A.J.B.
R.O.C. R.O.C. R.O.C.

BEYA
ELEVON

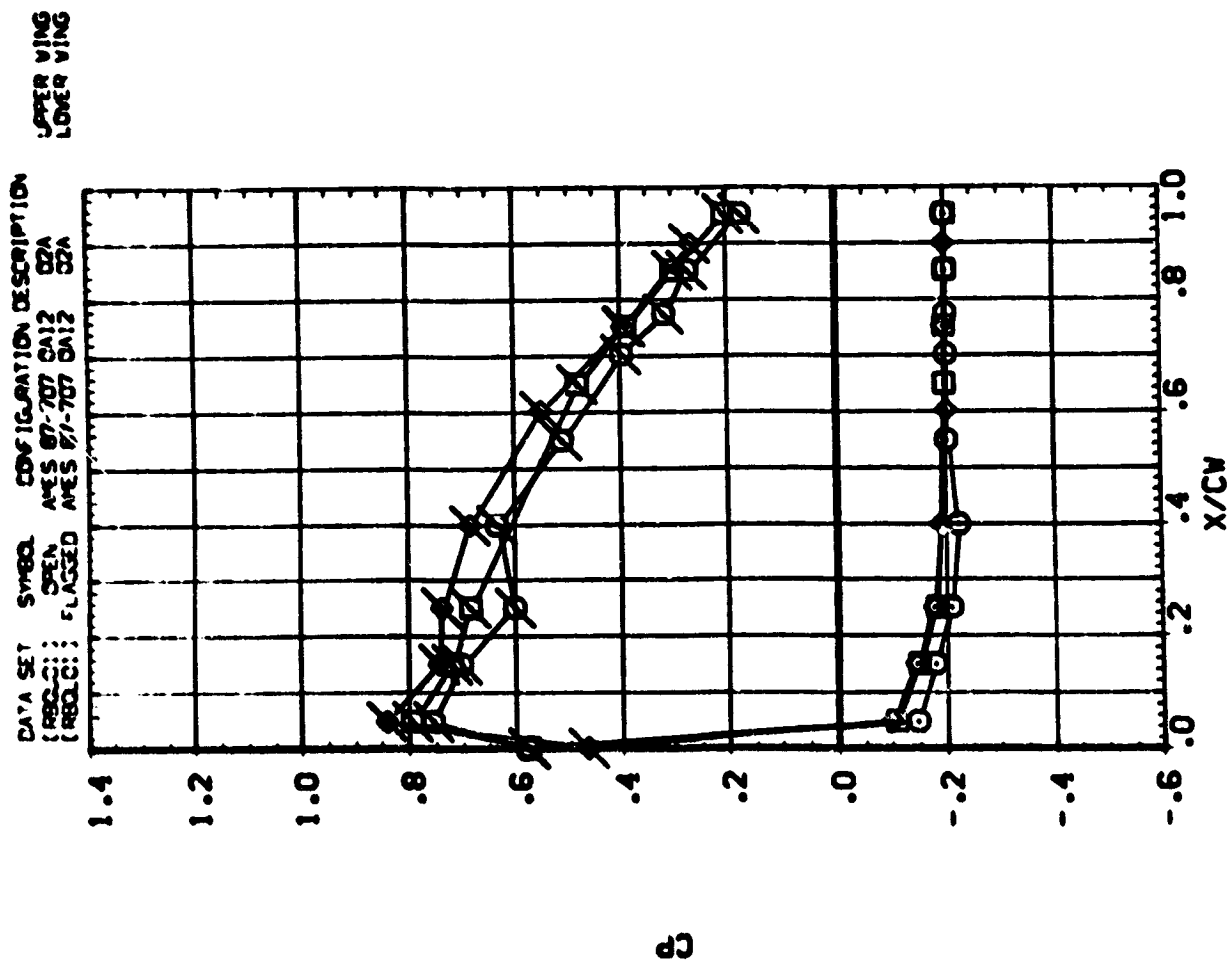
PAGE 61:



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

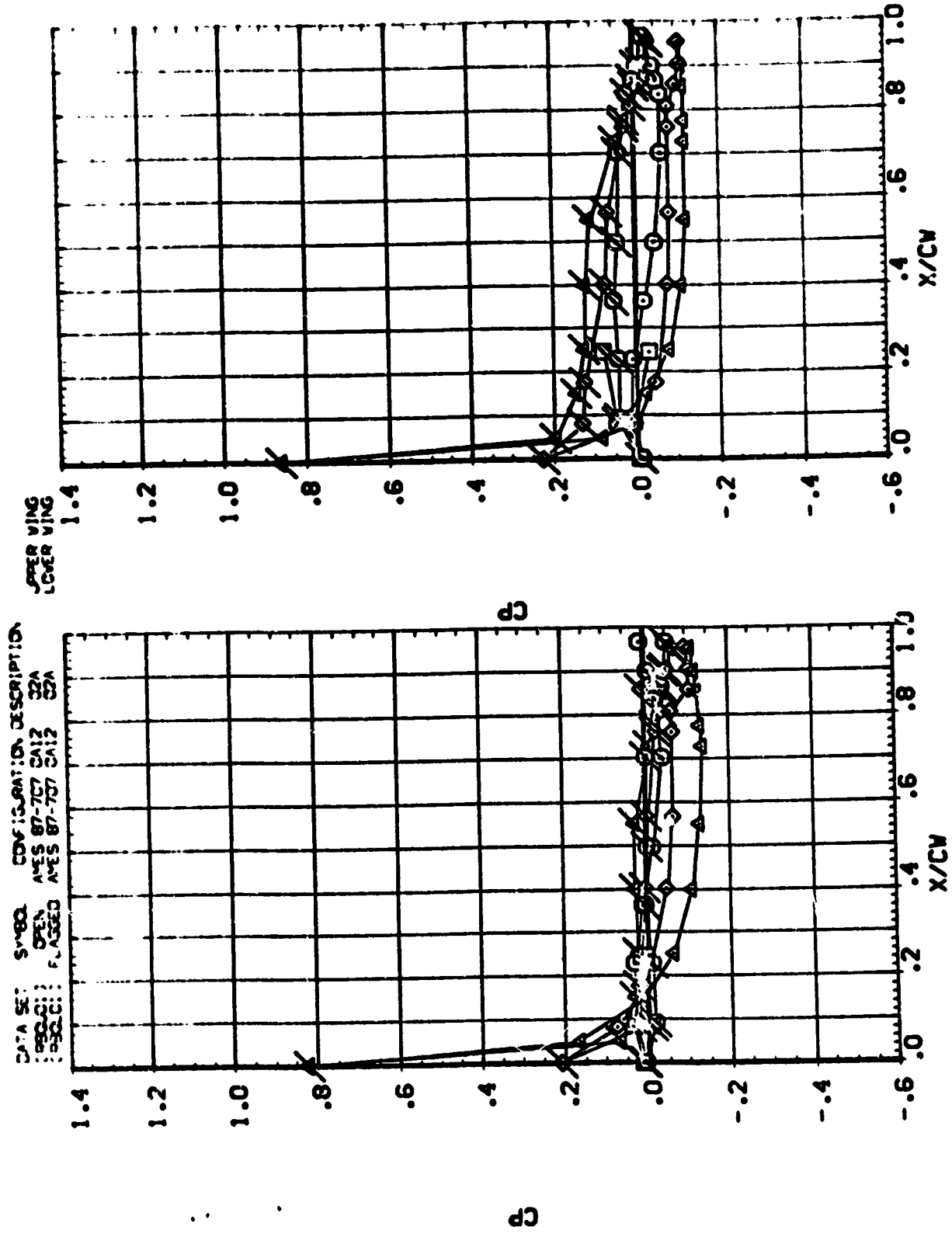
633

STATUS	V/EN	A. P. H.	MACH
Q	.673	:9.87C	2.45B
Q	.78C		
Q	.887		



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

SYMBOL: ∇ Δ \circ \square \diamond \triangle
 V/3: .299 .364 .477 .534
 A:2A: .127C 5.17C
 PAC: 3.5C2
 BETA: .000 .000 .000 .000
 ELEV: .000 .000 .000 .000
 PARAM: 210 VALS: .000 .000 .000 .000

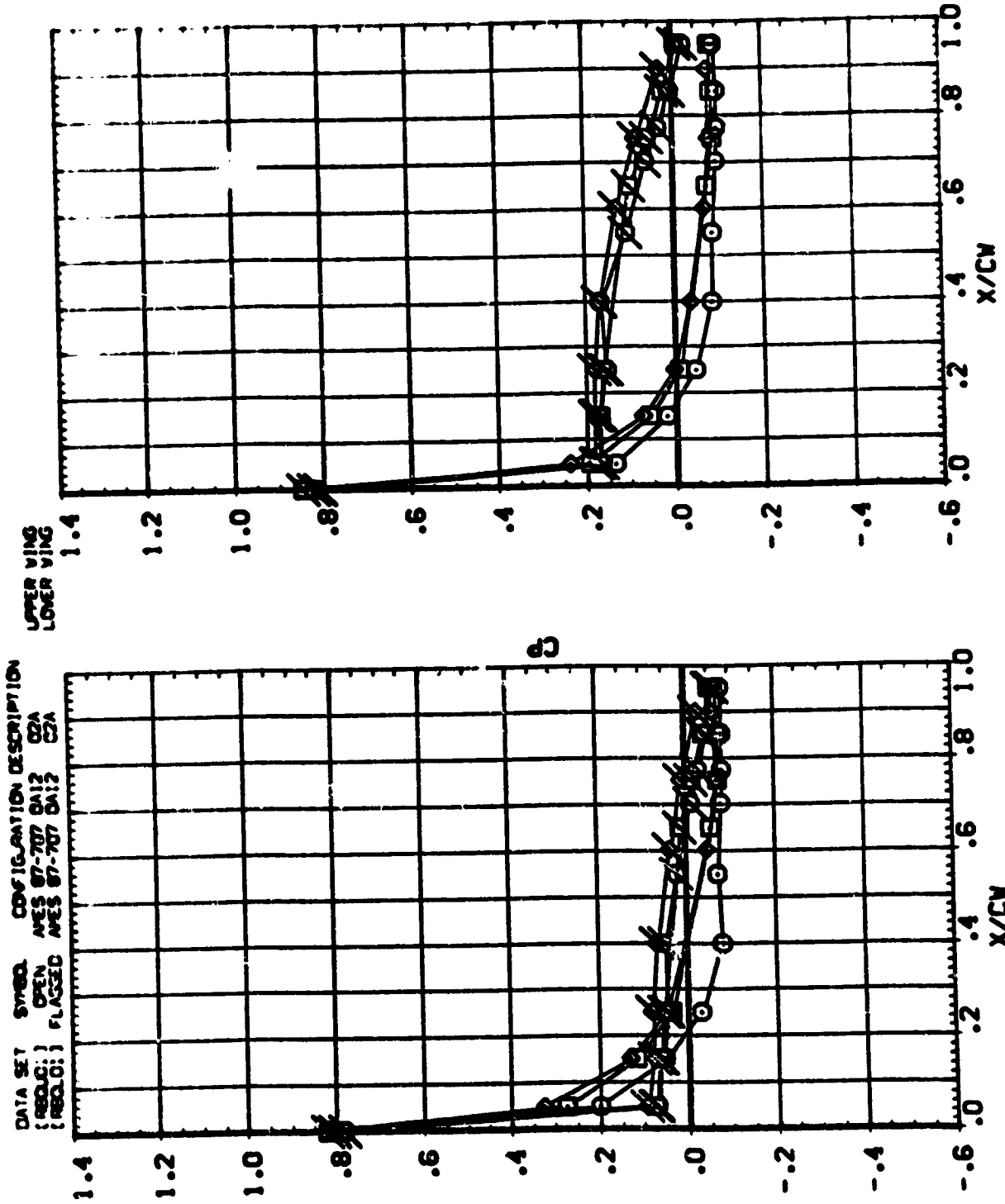


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 RE'A .000
 ELEV .000
 RADIUS 40.000

SYMBOL V/BW ALPHA MAC
 .573
 .78C 5.17C 3.502
 .087

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REQD.) OPEN AVE 87-707 DA12 C2A
 (REQD.) FLAGGED AVE 87-707 DA12 C2A

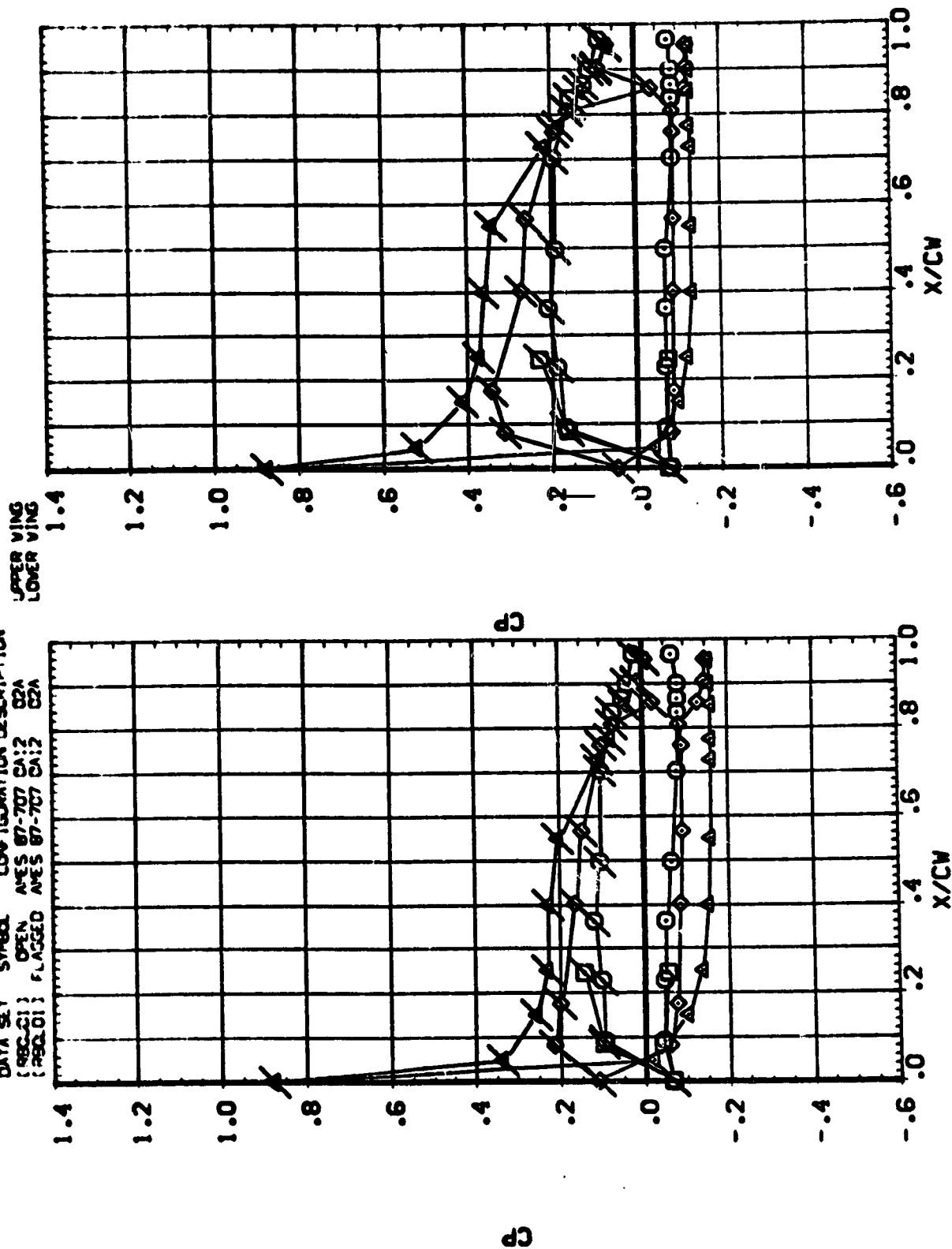


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

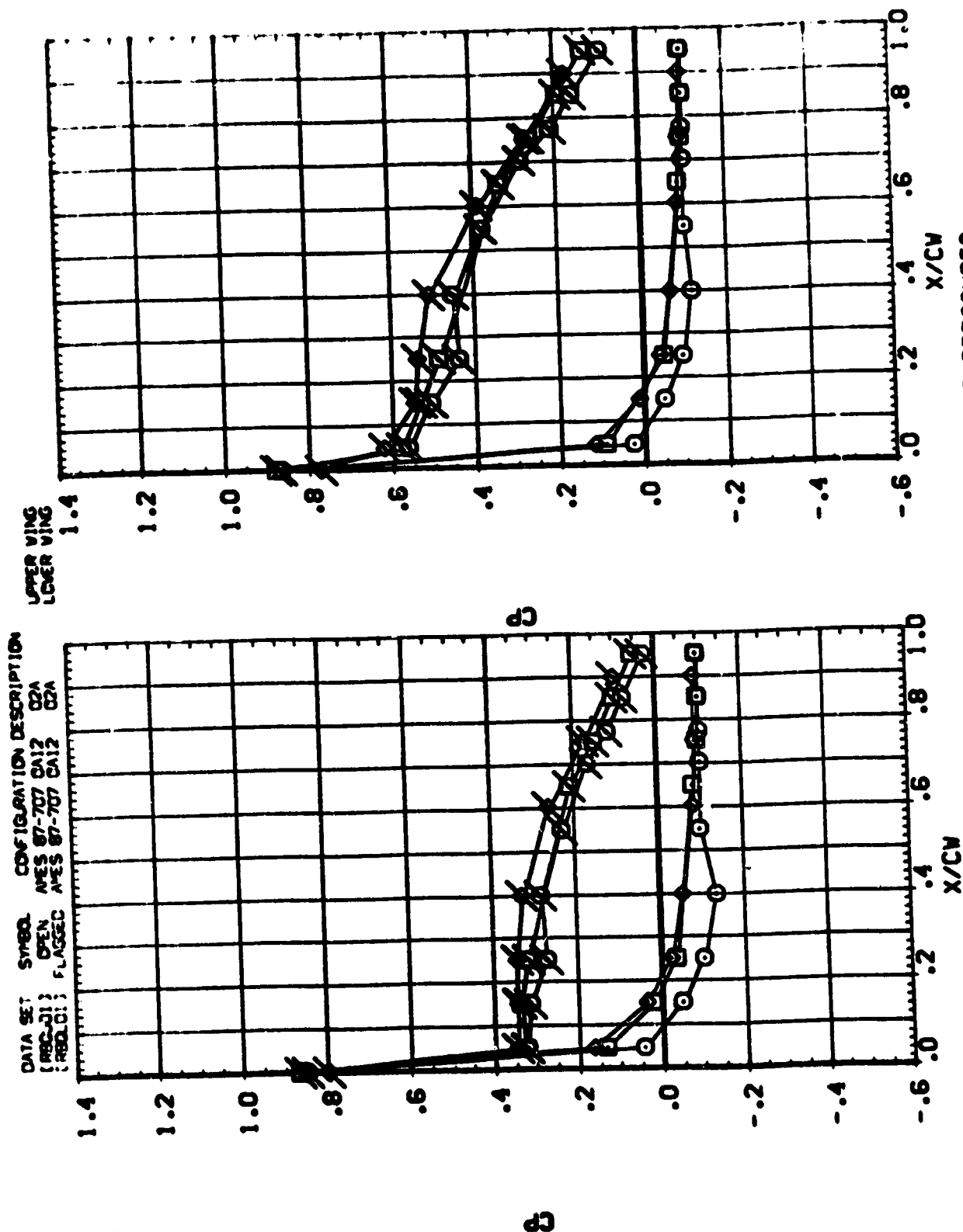
PARAMETRIC VALUES
 BETA .000 RUDER .000
 ELEVON .000 RUDEL 2 40.000

SYMBOL V/BN ALPHA WACH
 .799 10.130 3.502
 .364 15.050
 .427
 .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REC 01) OPEN AVES 87-707 CA:2 C2A
 (REC 01) FLAGGED AVES 87-707 CA:2 C2A



SYMBOL	V/BN	ALPHA	WACH
○	.673	10.130	3.502
○	.700	15.056	
◇	.687		



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 .000 RLODR 40.000
 .000 RLODR 40.000

BETA
 ELEVON

ALPHA 3.502

ALPHA 70.020

ALPHA 799

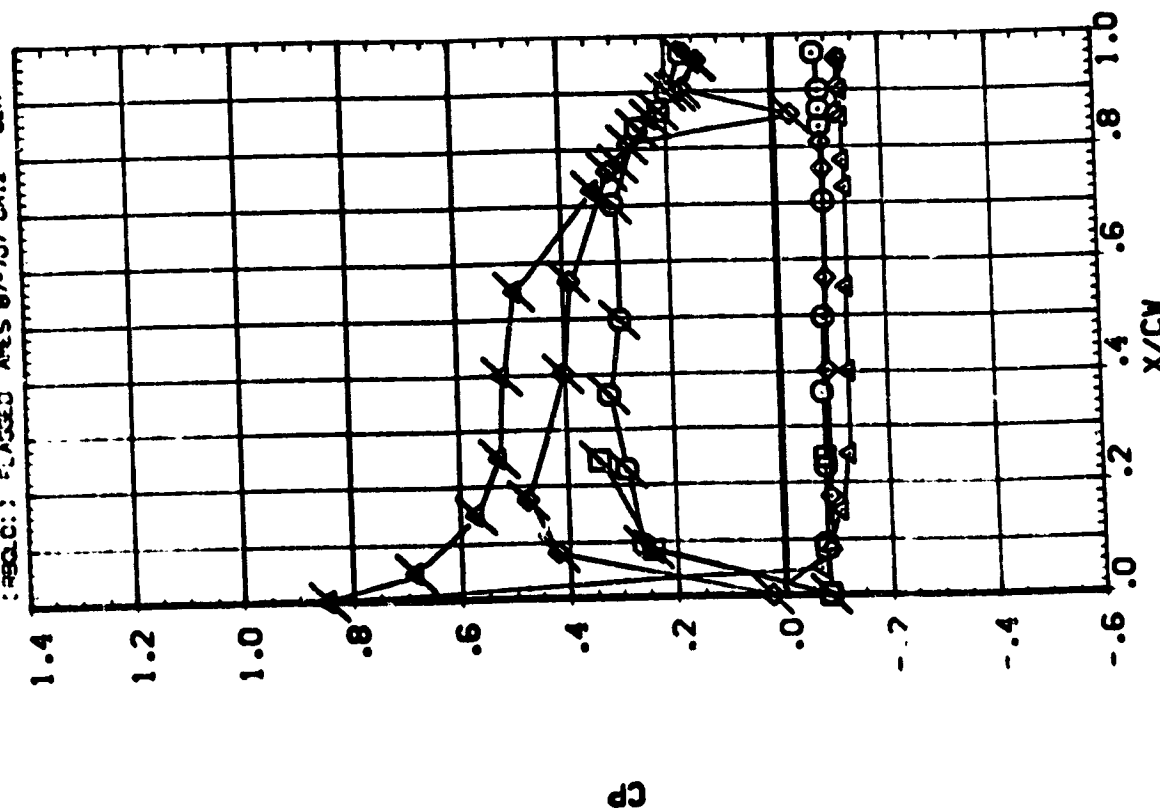
ALPHA 364

ALPHA 427

ALPHA 534

UPPER WING
 LOWER WING

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RLOC) OPEN ANES 87-707 CA12 Q2A
 (RLOC) FLAPPED ANES 87-707 CA12 Q2A



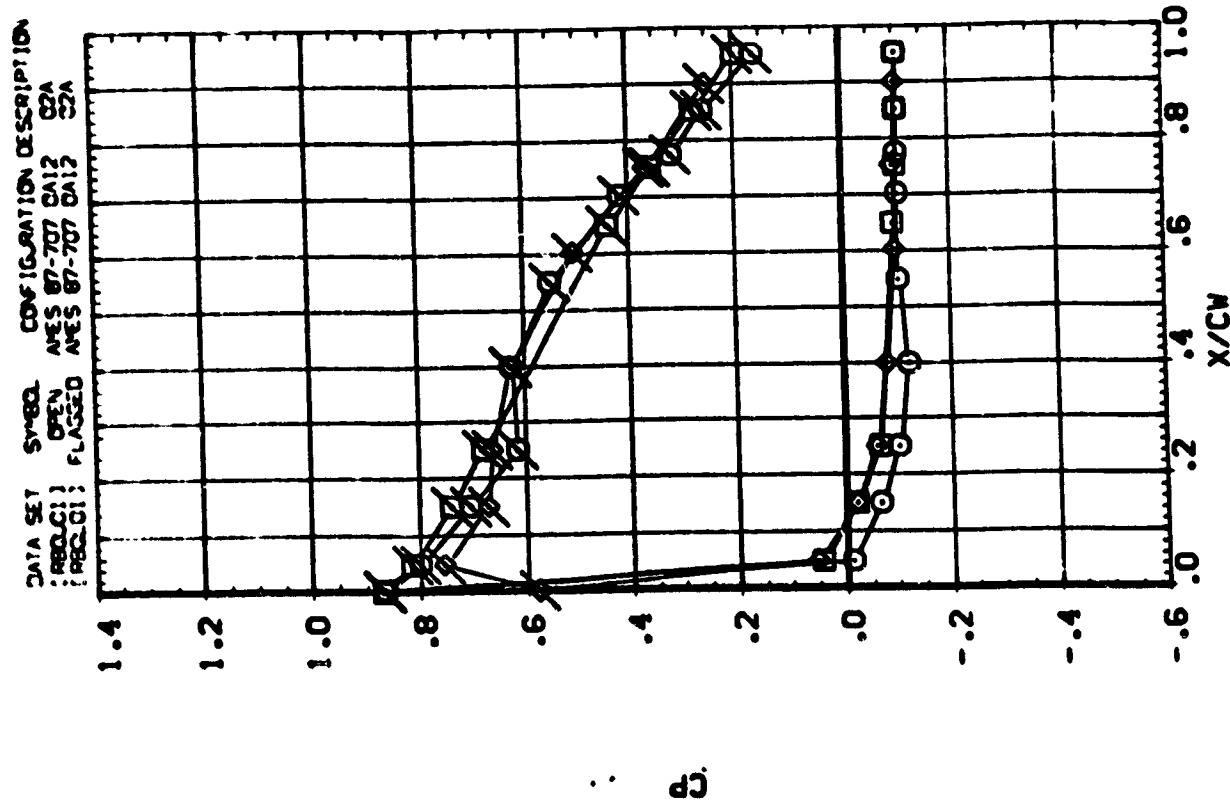
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAM 18.1 1.1 1.1
 .000 .000 .000
 .000 .000 .000
 .000 .000 .000

BETA
 ELEVON

SYMBOL 1/20 .673 .780 .887
 ALPHA 20.020 3.502
 "AC"

UPPER WING
 LOWER WING

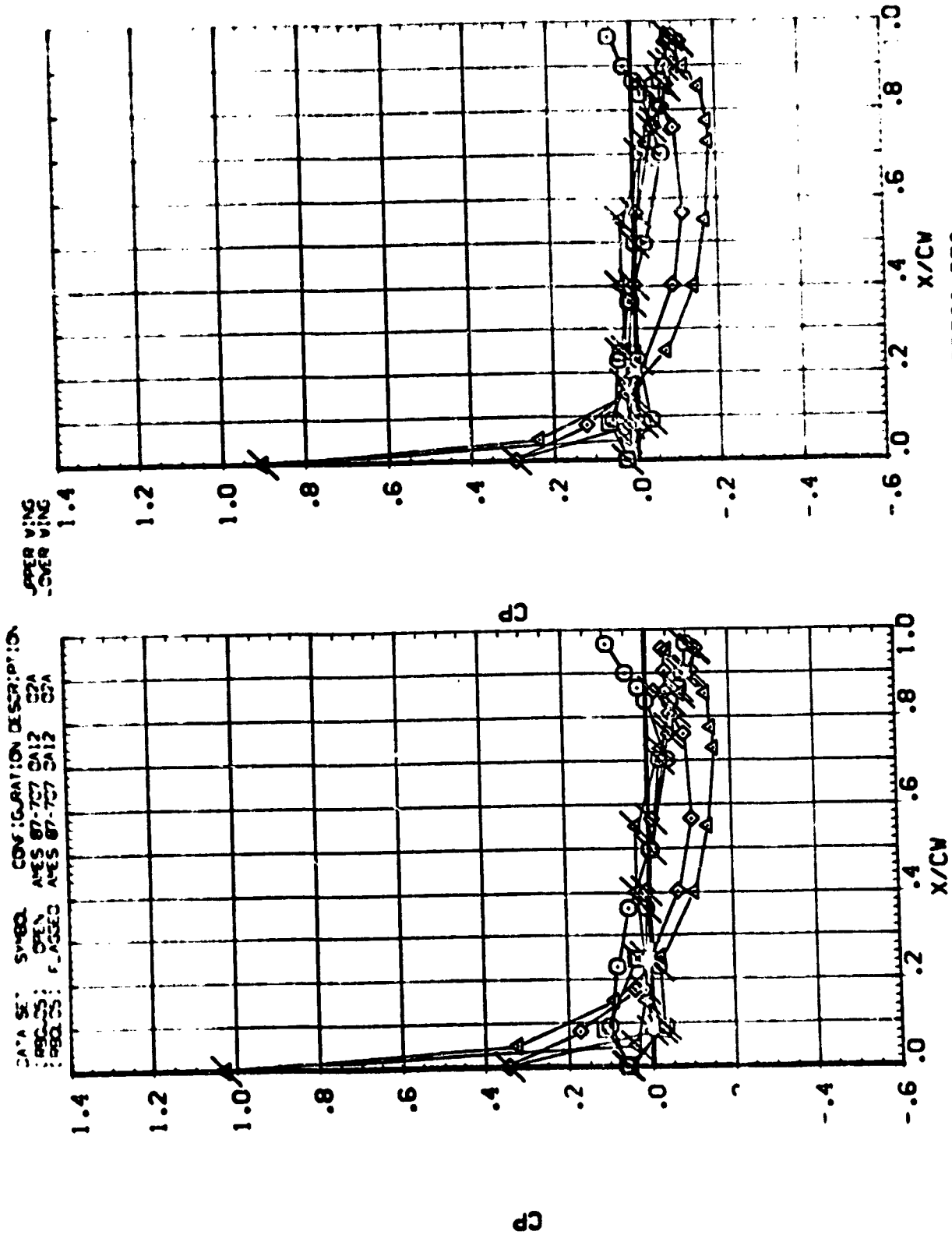


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

SYMBOL: γ/β β α $MACH$
 () .789 6.442 2.450
 () .364 3.300
 () .477
 () .534

DYNAMIC PRESSURE
 ALPHAS
 1.000 2.000 3.000 4.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 890-05 OPEN ASES 87-707 CA12 C2A
 890-05 FLASSED ASES 87-707 CA12 C2A

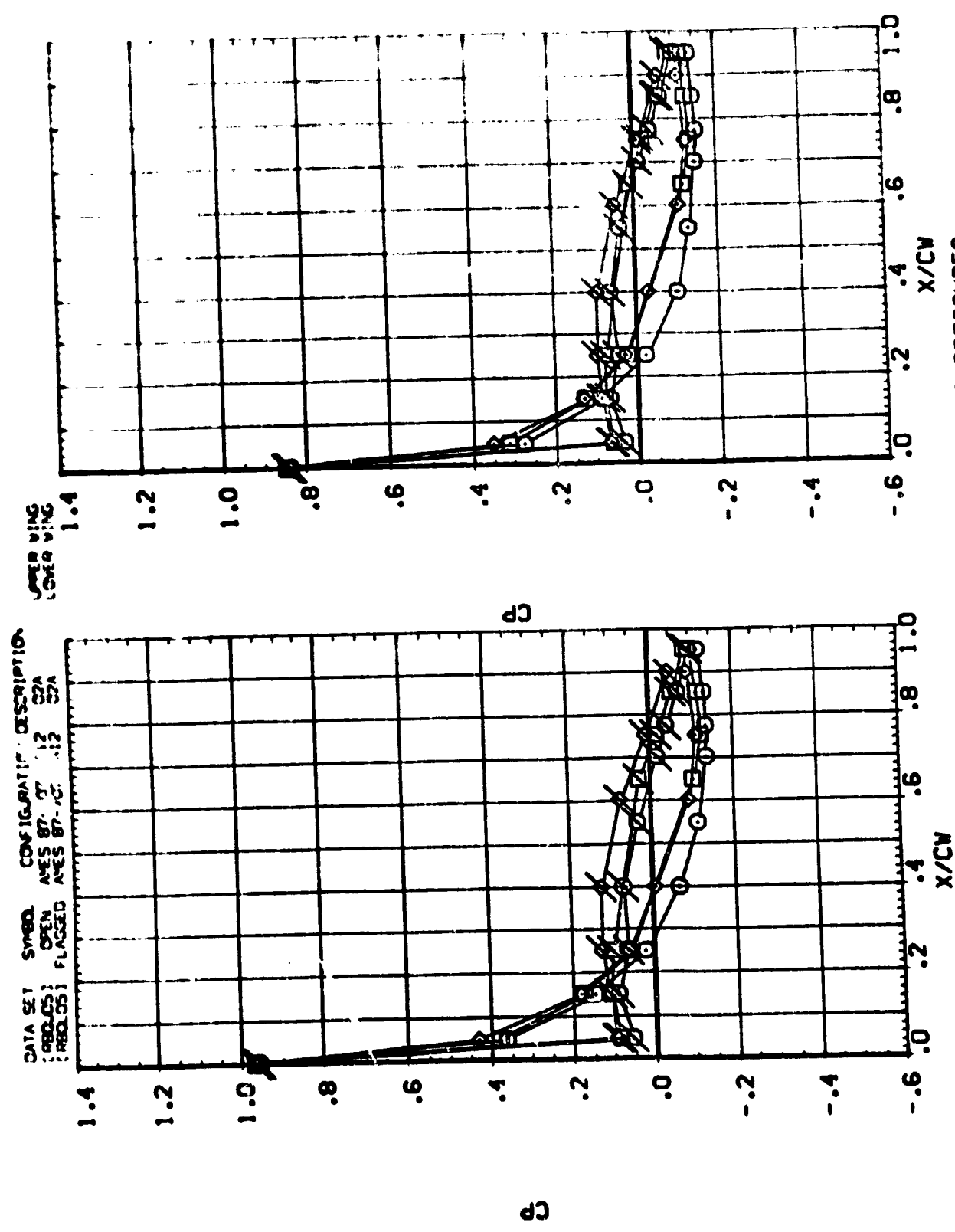


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAM: R/C VA .15
 .000 0.000 0.000
 .000 0.000 0.000

ALPH
 ELEVON

SYMBOL V/BU BETA MACH
 .673 6.440 2.498
 .780 3.300
 .687



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES

ALPHA
ELEVON

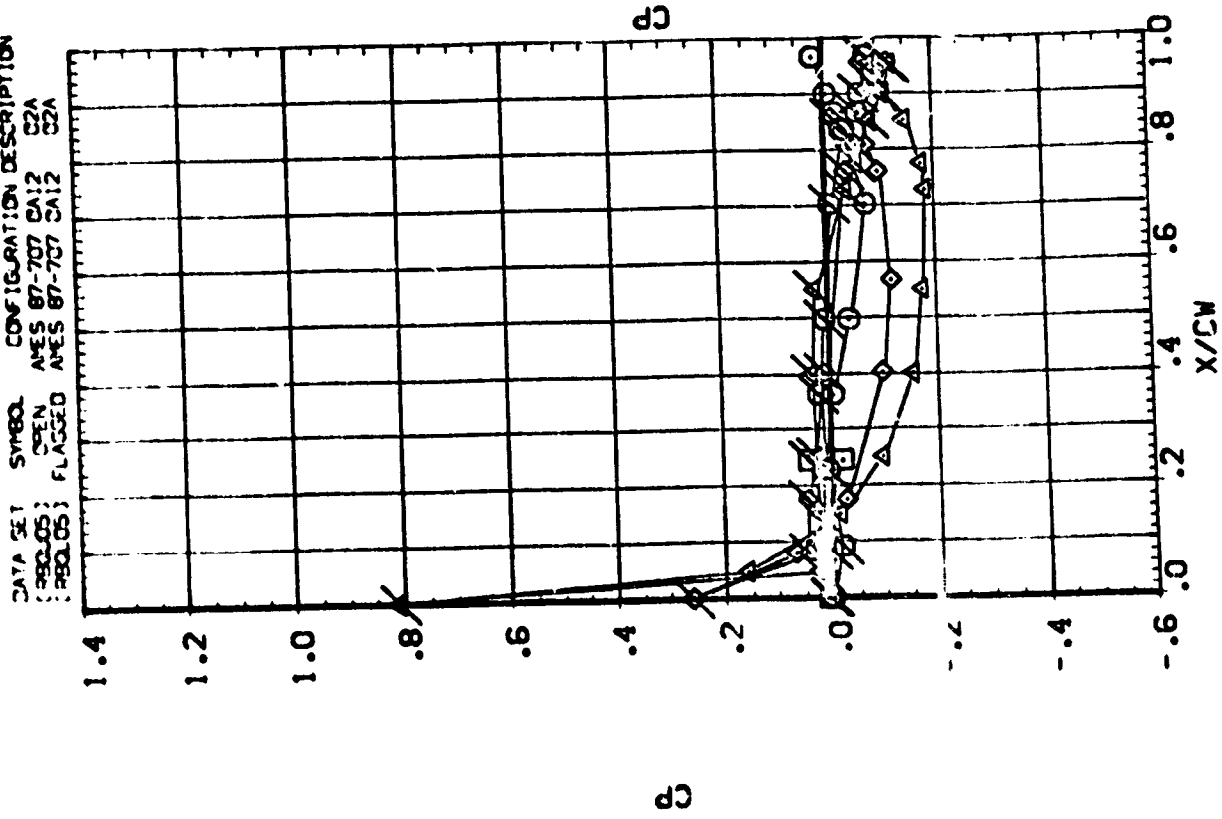
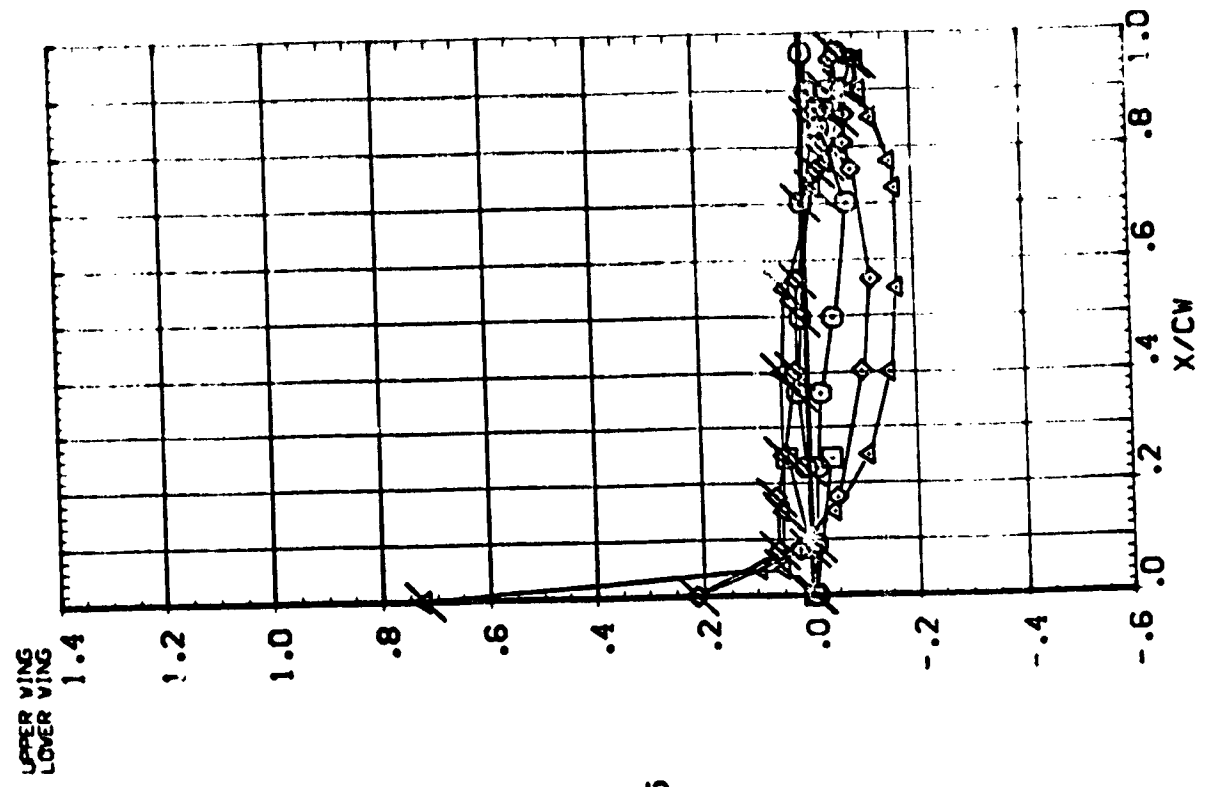
20.000
2.000
40.000

BETA MACH

2.198
3.060

1/80
.299
.364
.427
.534

DATA SET SYMBOL CONFIGURATION DESCRIPTION
[RELODS] OPEN ANES 87-707 CA12 C2A
[RELODS] FLAGGED ANES 87-707 CA12 C2A

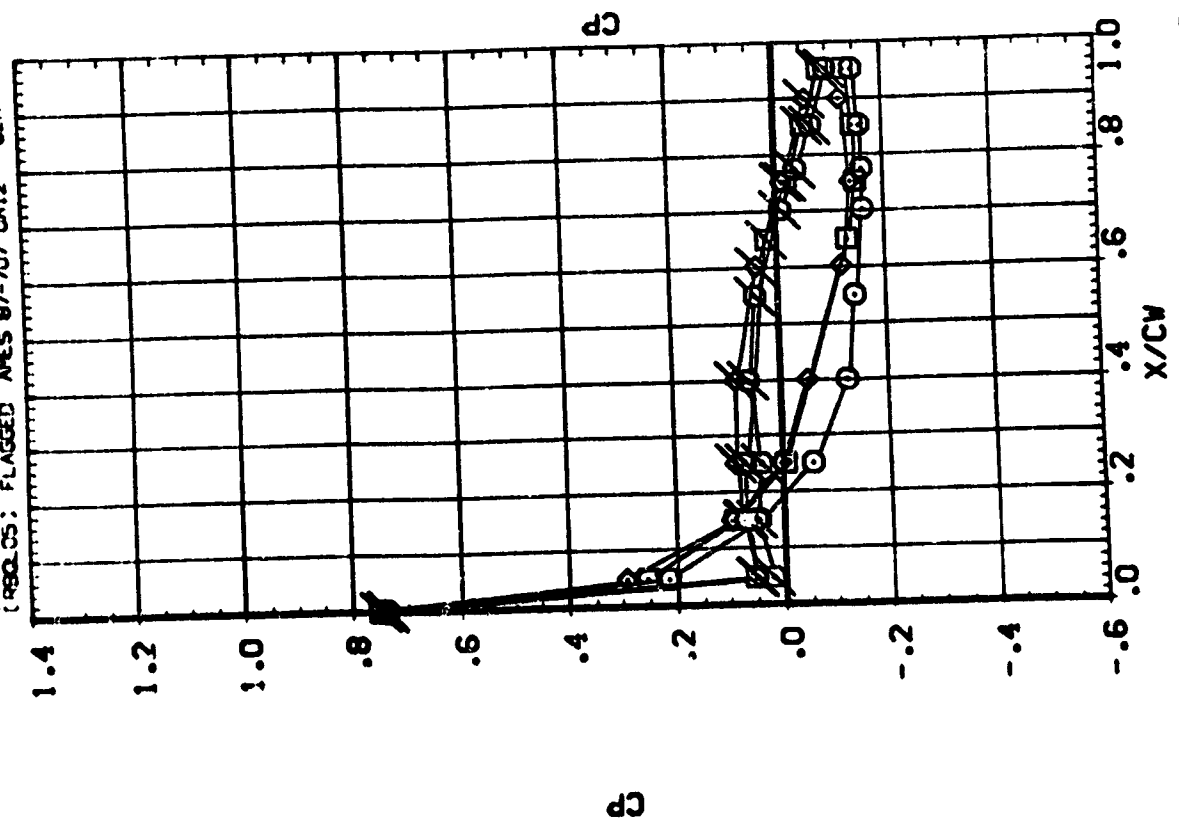
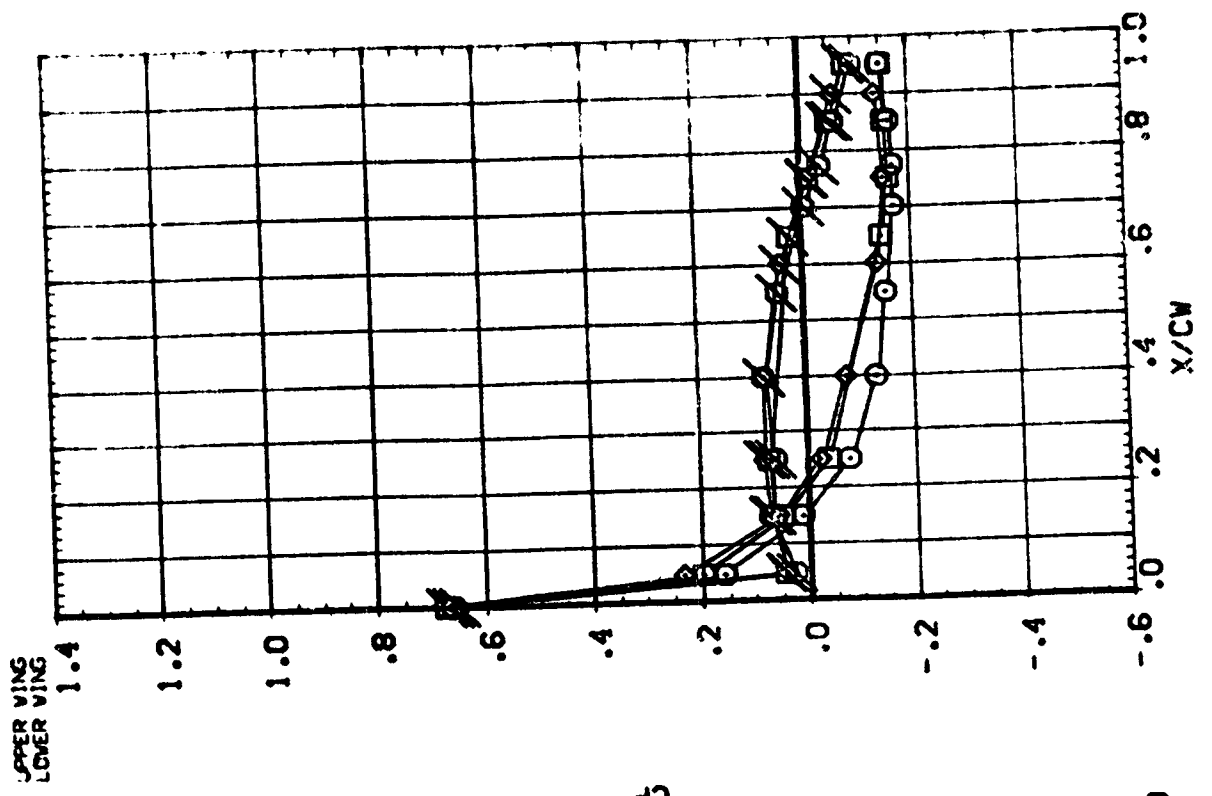


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETER VALUES
 ALPHA .000
 ELEV .000
 RUDER .000
 RUOTLR .000
 -20.000
 40.000

SYMBOL Y/B_W BETA MACH
 .673 .160 2.498
 .780 3.060
 .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R80.05) OPEN ARES 87-707 CA12 CZA
 (R80.05) FLAGGED ARES 87-707 CA12 CZA



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 .000 RUDDER
 .000 RUDDER
 -20.000
 40.000

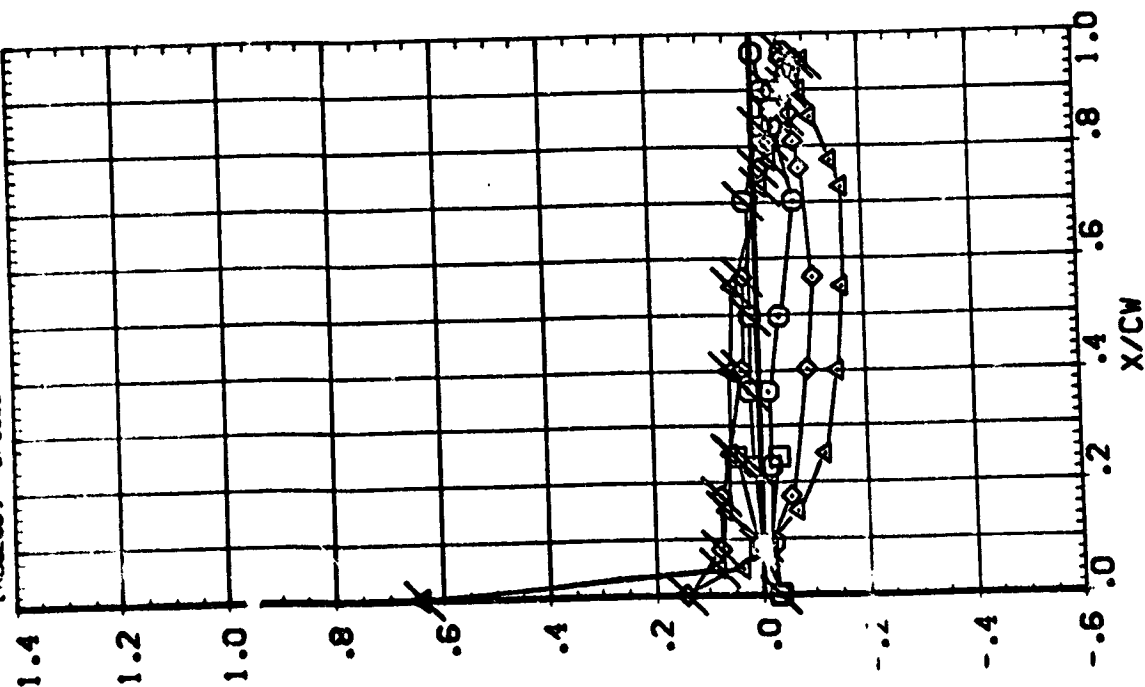
ALPHA
 ELEVON

BETA 6.290 MACH 2.498

SYMBOL Y/BV
 .299
 .364
 .427
 .534

UPPER WING
 LOWER WING

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REQLOS) OPEN AMES 87-707 QAI2 Q2A
 (REQLOS) FLAGGED AMES 87-707 QAI2 Q2A



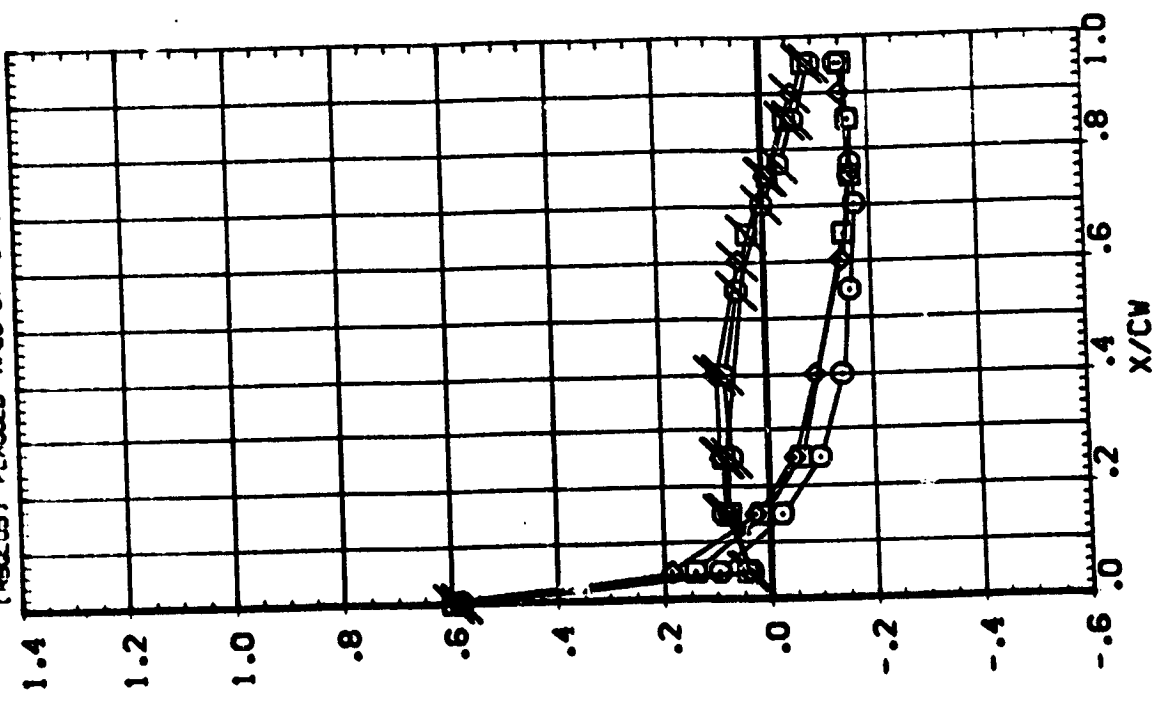
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA .000
 ELEVON .000
 RUDER .000
 RUDLER 40.000

SYMBOL Y/BN BETA MACH
 .673 6.250 2.498
 .78C
 .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REQLOS) OPEN AVES 87-707 CA12 02A
 (REQLOS) FLAGGED AVES 87-707 CA12 02A

UPPER WING
 LOWER WING



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

SYMBOL
 ○ □ ◇ △

Y/BW
 .789
 .364
 .427
 .534

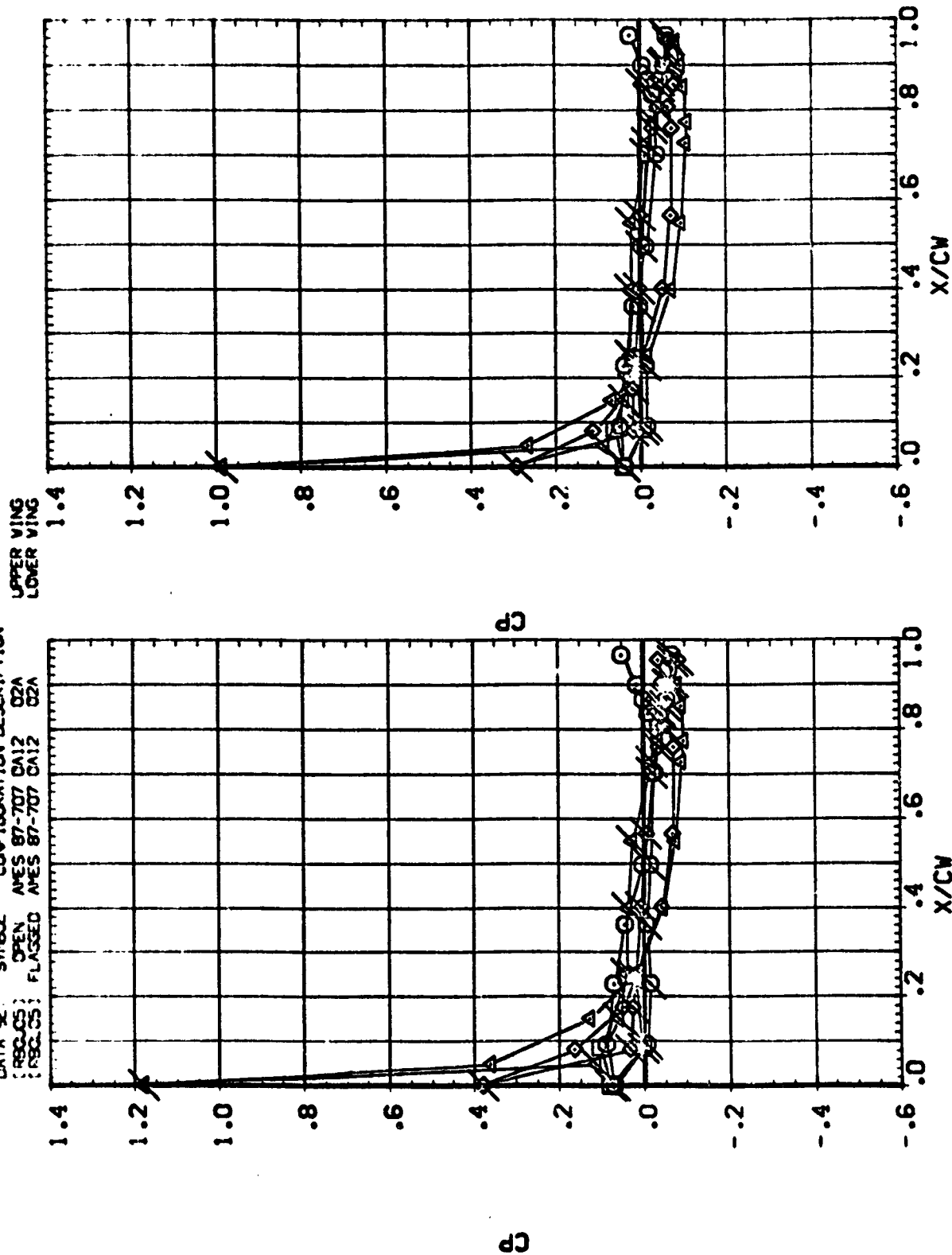
BETA
 -6.870
 -3.420

MACH
 3.501

PARAMETRIC VALUES

ALPHA
 ELEVON
 .000
 .000
 RUDER
 RUDER
 -20.000
 40.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [RBC:CS] OPEN APES 87-707 CA12 OZA
 [RBC:CS] FLAGGED APES 87-707 CA12 OZA



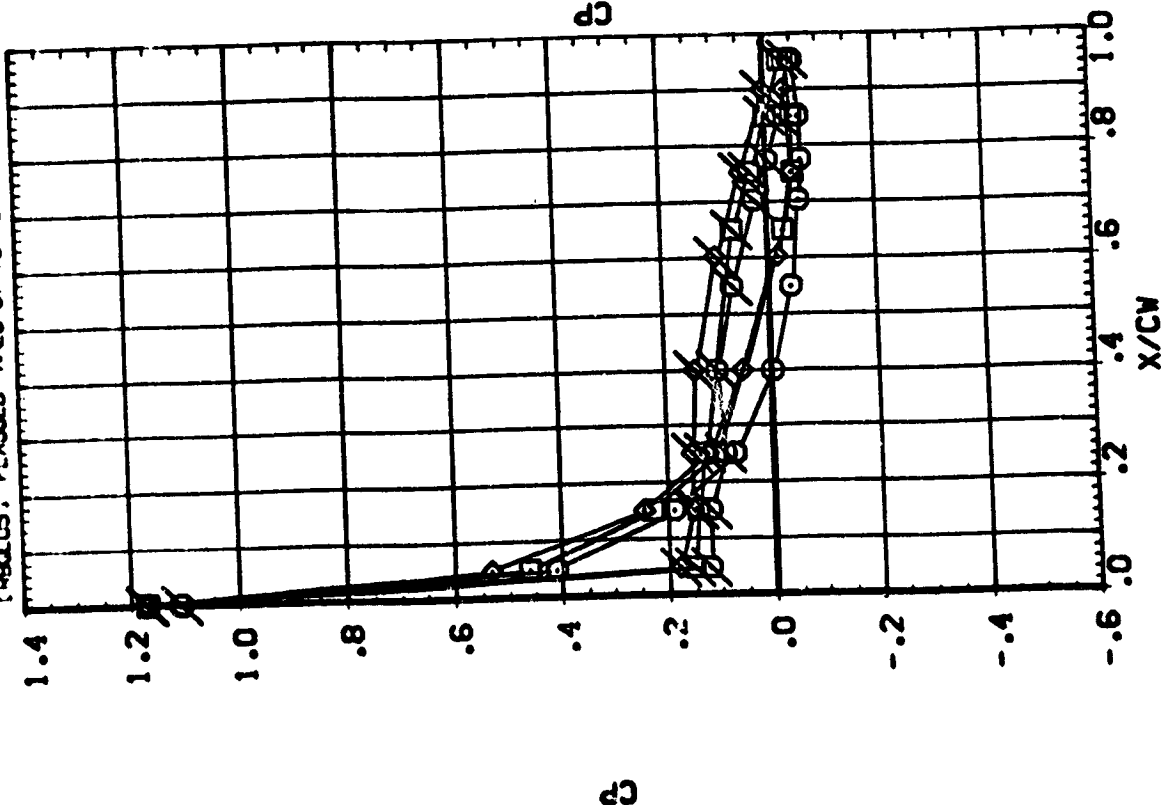
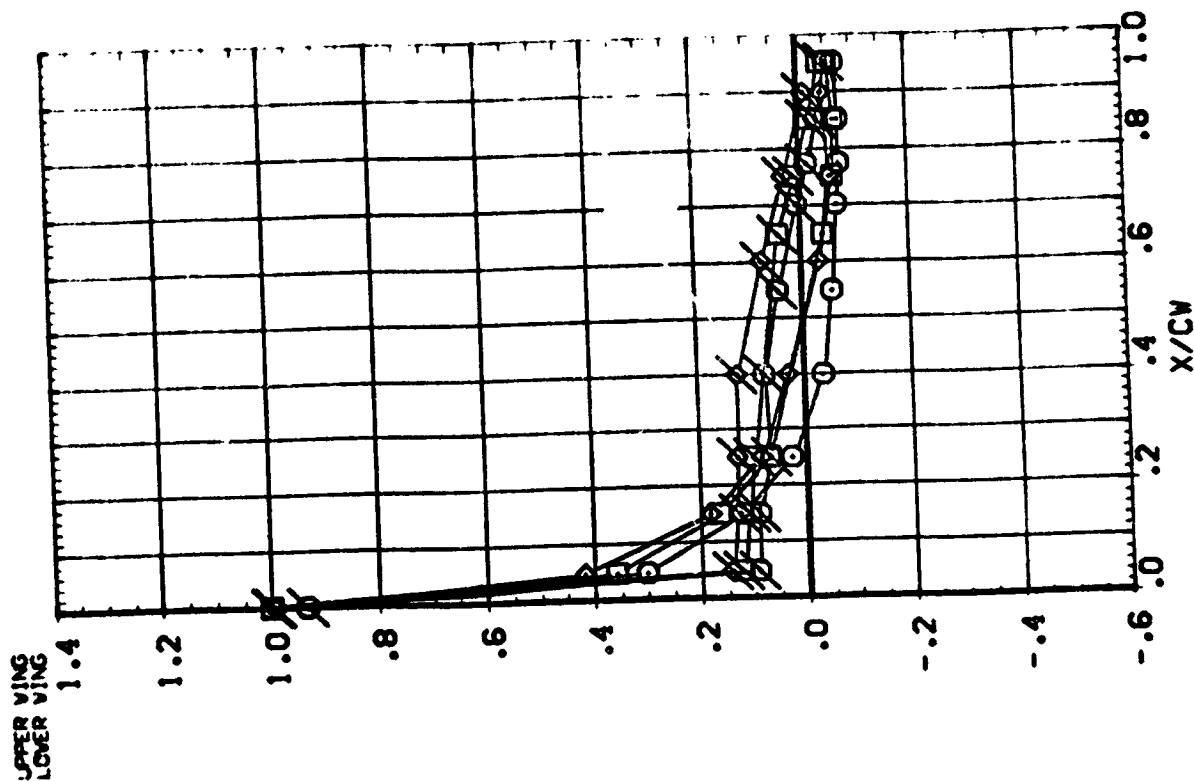
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

UNIQUE 1111 1 00
 .000 RUDER -75.000
 .000 RUDLR 45.000

ALPHA
 ELEVON

SYMBOL Y/BV BETA MACH
 .673 -6.670 3.501
 .78C -3.420
 .887

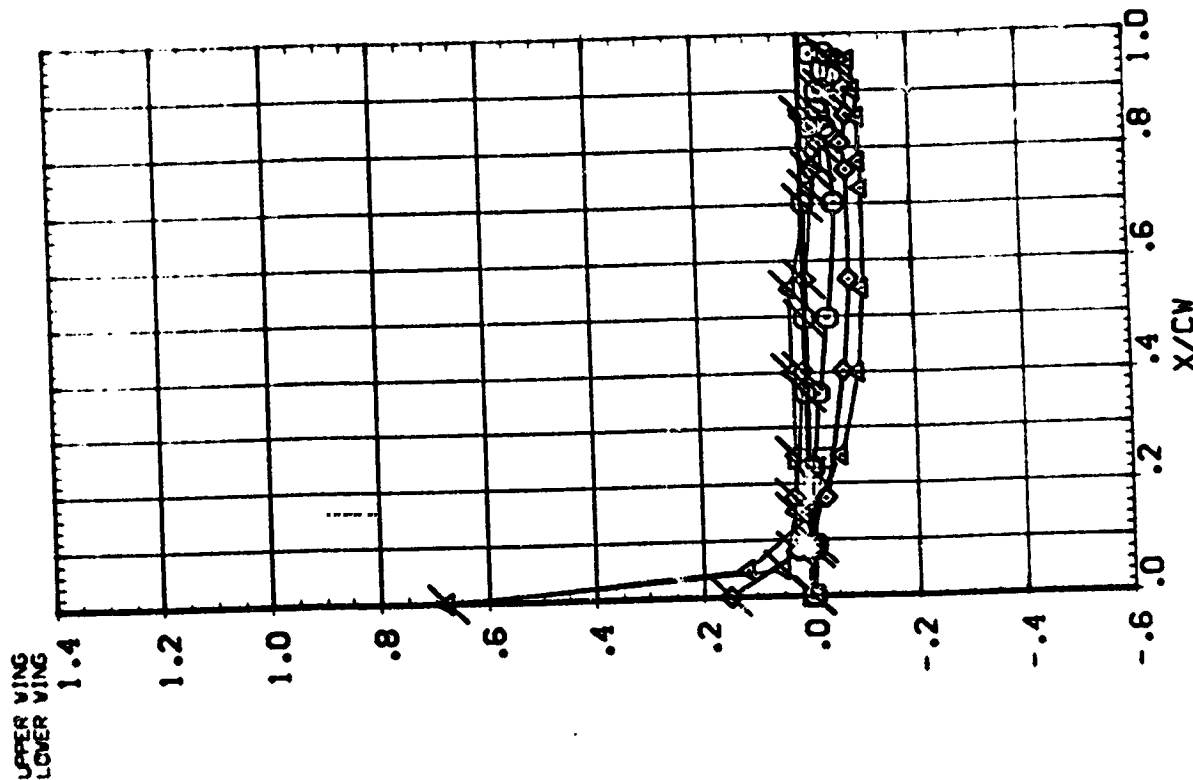
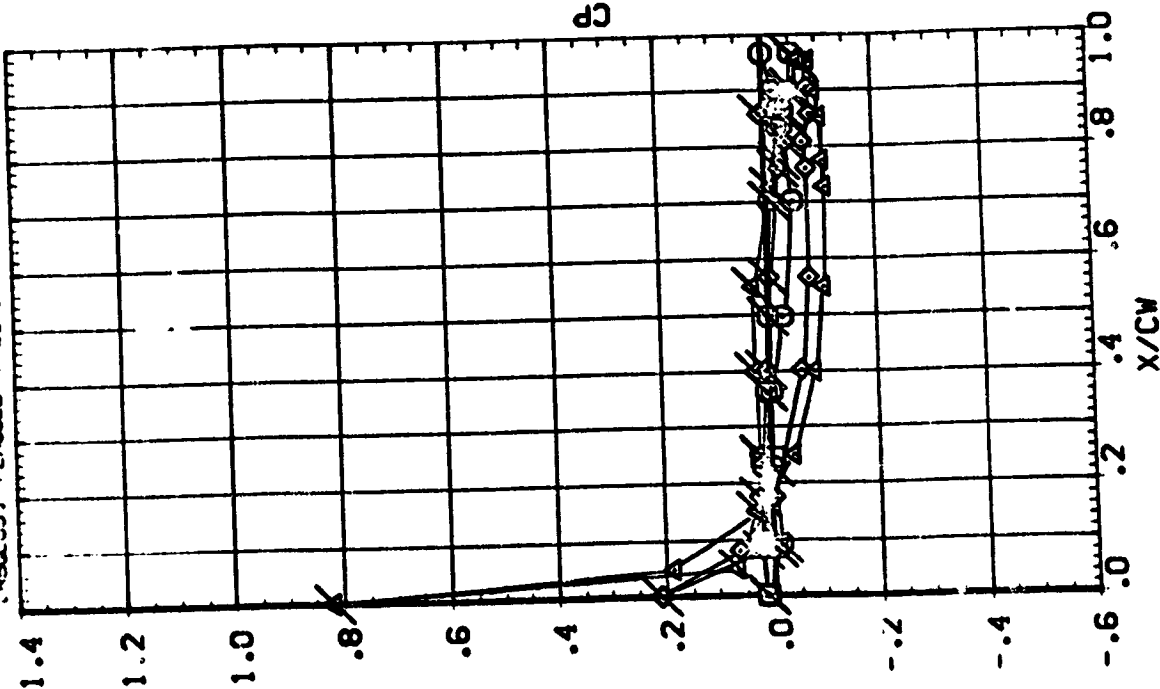
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RBLCS) OPEN ASES 87-707 CA12 CZA
 (RBLCS) FLAGGED ASES 87-707 CA12 CZA



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

SYMBOL V/BN BETA MACH
 () .299 .160 3.501
 - - .364 3.180
 ◇ .427
 △ .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RBC)S OPEN ARES 87-707 DA:2 02A
 (RBC)S FLAGGED ARES 87-707 DA:2 02A



PARAMETRIC VALUES
 ALPHA .000 RUDDER -70.000
 ELEVON .000 RUDEL R 40.000

CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

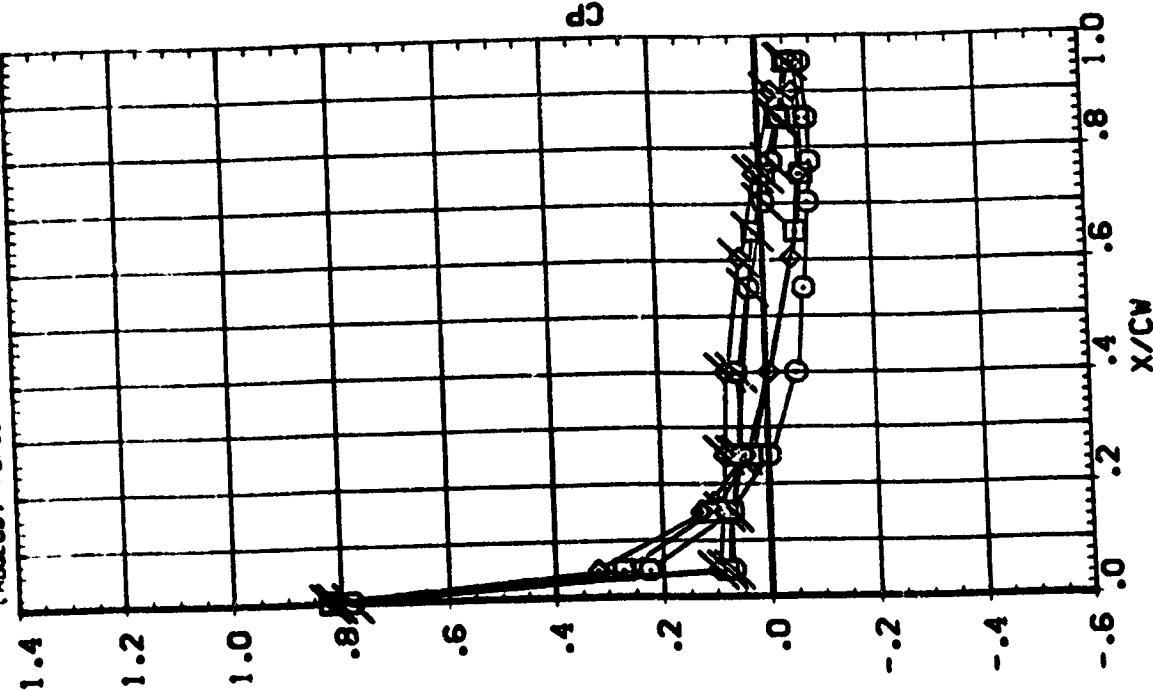
SYMBOL γ/β BETA α MAC

.673
.78C
.887

-.16C
3.18C

3.501

DATA SET SYMBOL CONFIGURATION DESCRIPTION
(RESOLUS) OPEN APES 87-707 CA12 C2A
(RESOLUS) FLAGGED APES 87-707 CA12 C2A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

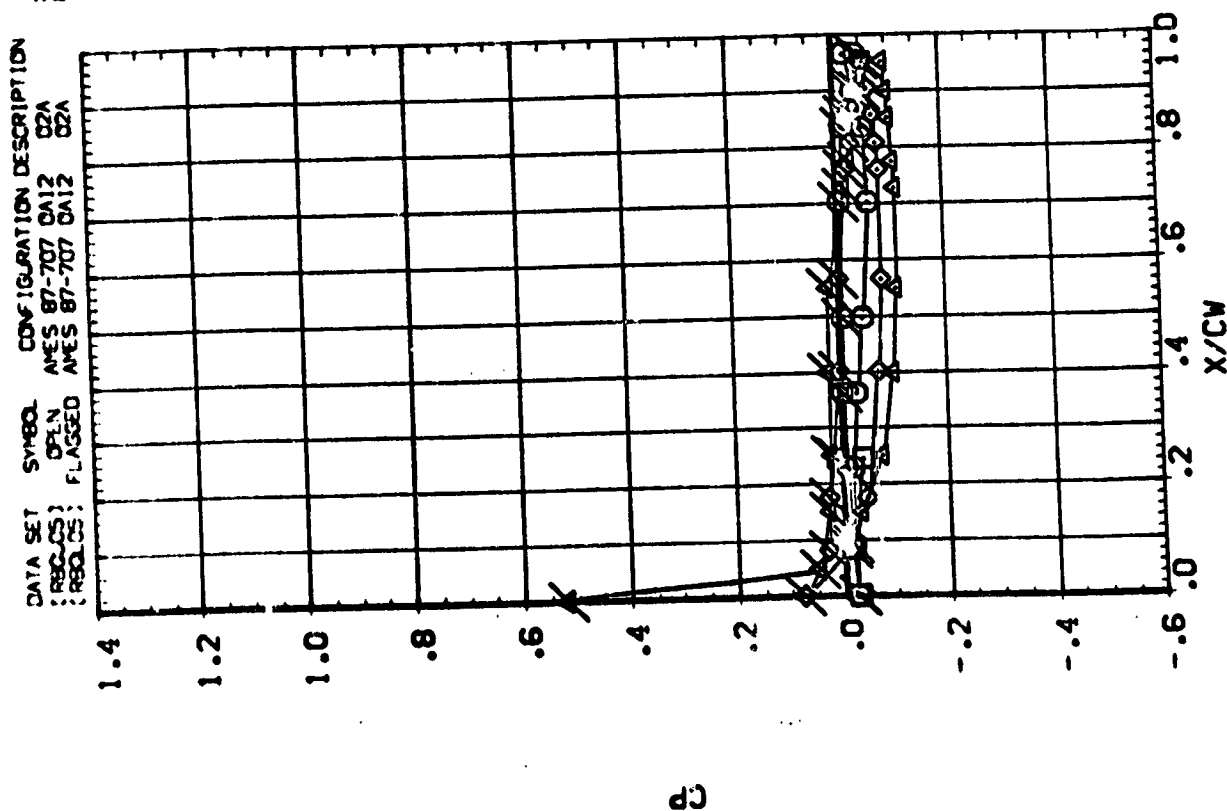
PARAMETER VALUES
ALPHA .00C
ELEVON .00C
RUDDER .00C
RUDDER 42.00C



PARAMETRIC VALUES
 ALPHA .000 RUDER .20.000
 ELEVON .000 RUDER 40.000

SYMBOL Y/3M BETA MACH
 .799 6.530 3.501
 .364
 .427
 .534

UPPER WING
 LOWER WING



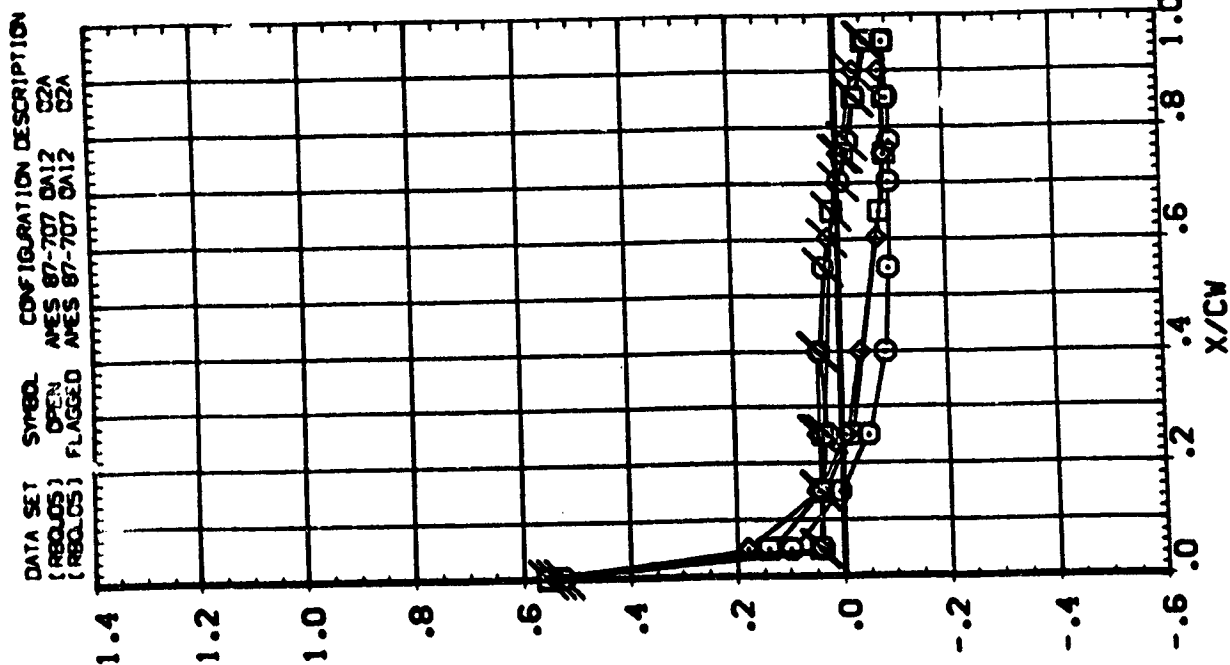
PARAMETRIC VALUES
 .000 RJOER
 .000 RJOFLR
 -20.000
 40.000

ALPHA
 ELEVON

BETA 6.530
 MACH 3.501

S.MBC. V/BM
 .673
 .780
 .887

UPPER WING
 LOWER WING



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

SYMBOL

V/BV
 .299
 .364
 .427
 .534

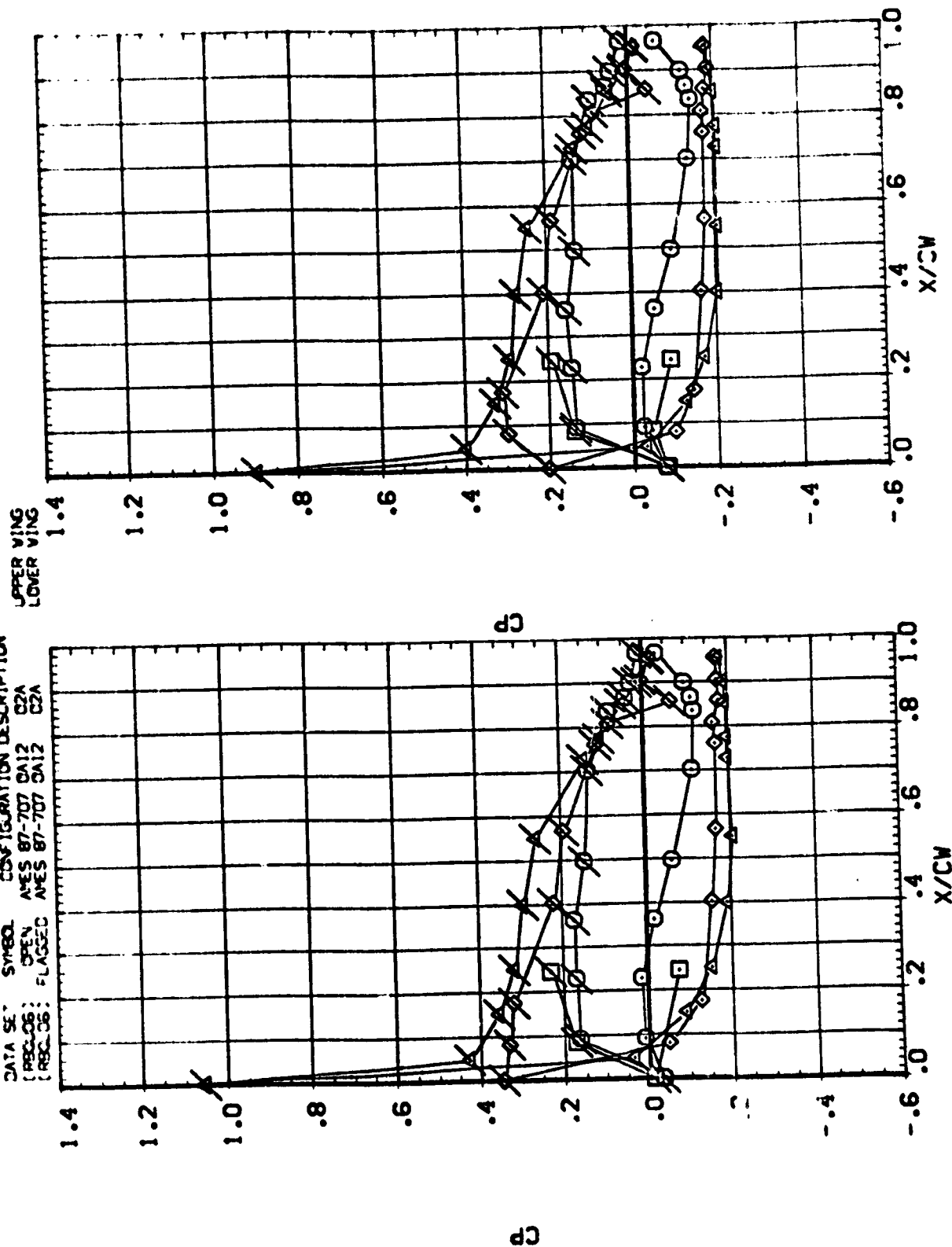
BETA
 -6.52C
 -3.34C

MACH
 2.498

PARAMETRIC VALUES

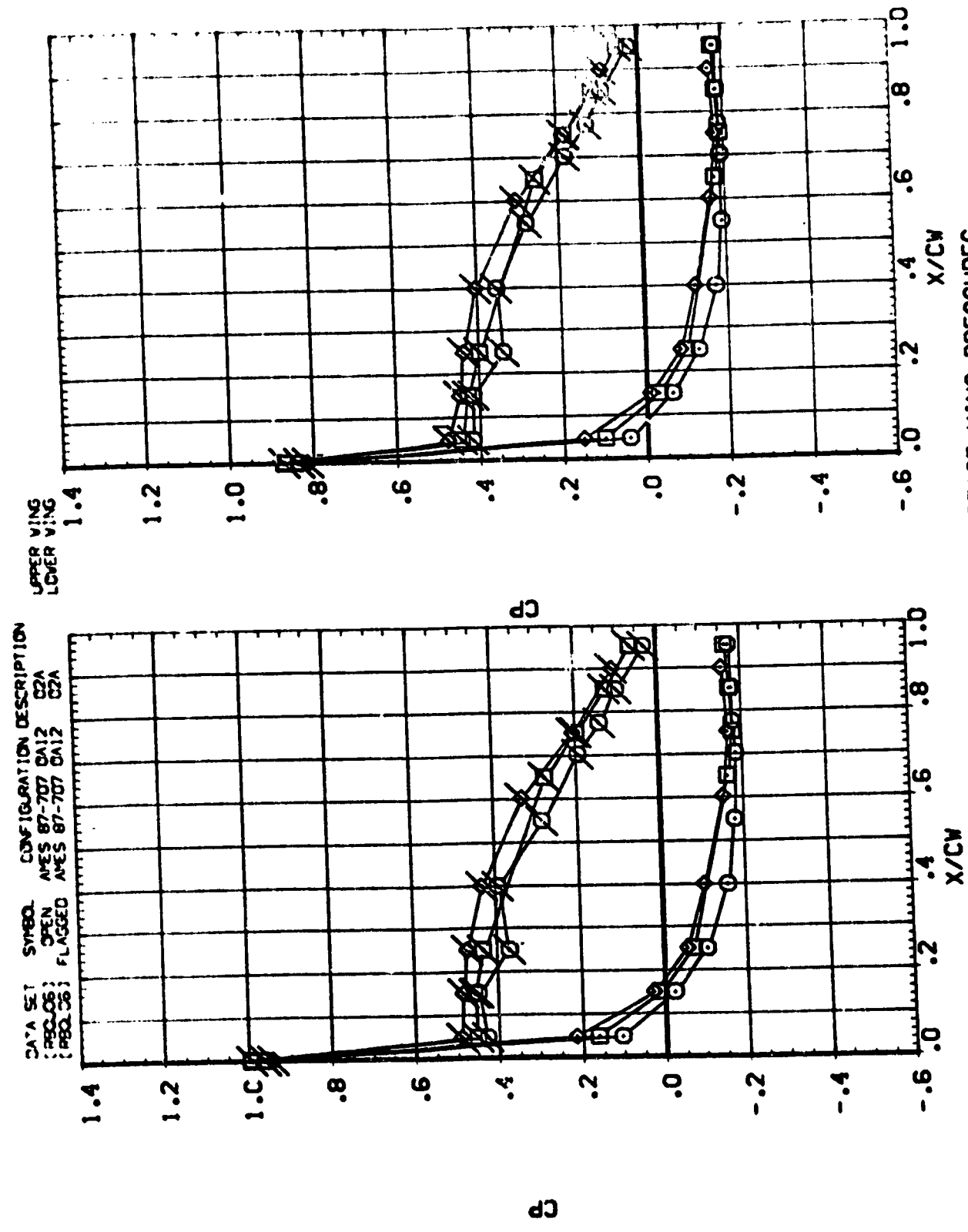
ALPHA
 ELEVON
 .000
 .000
 RUDER
 RUDLR
 -20.000
 40.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RECL06) OPEN AMES 87-707 DA12 C2A
 (RECL06) FLAGGED AMES 87-707 DA12 C2A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

SYMBOL	V/B	BETA	MACH	ALPHA	PARAMETER VALUES
○	.673	-6.520	2.498	ELEVON	0.000
○	.780	-3.340			0.000
○	.887				0.000



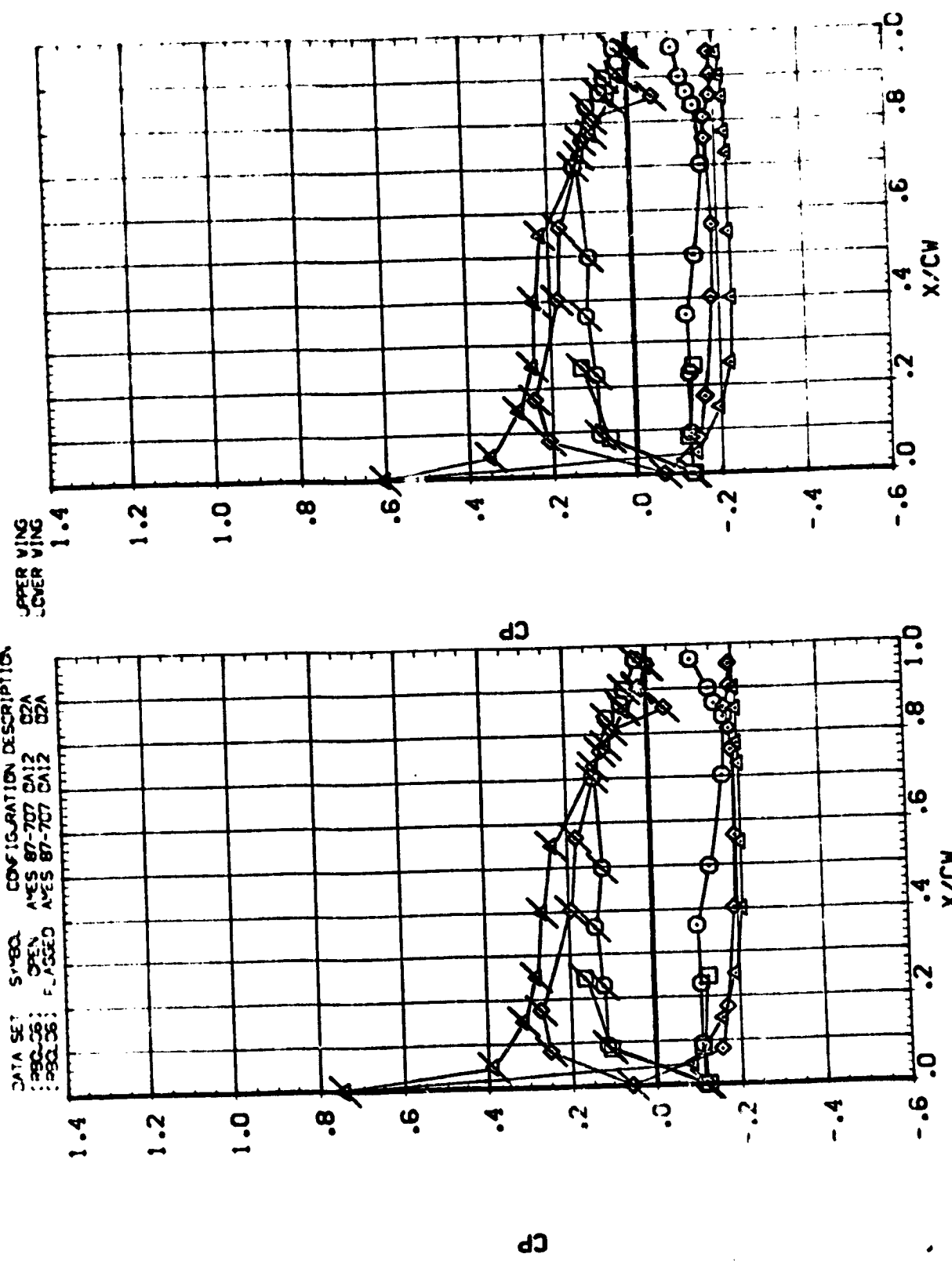
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA 10.000 20.000 30.000
 ELEVON .000 2.000 40.000

SYMBOLS
 1/3 299
 1/3 364
 1/3 427
 1/3 534

BETA 1.160 2.498
 3.020

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 180.06 OPEN AYES 87-707 CAL2 CZA
 180.06 FLASSED AYES 87-707 CAL2 CZA

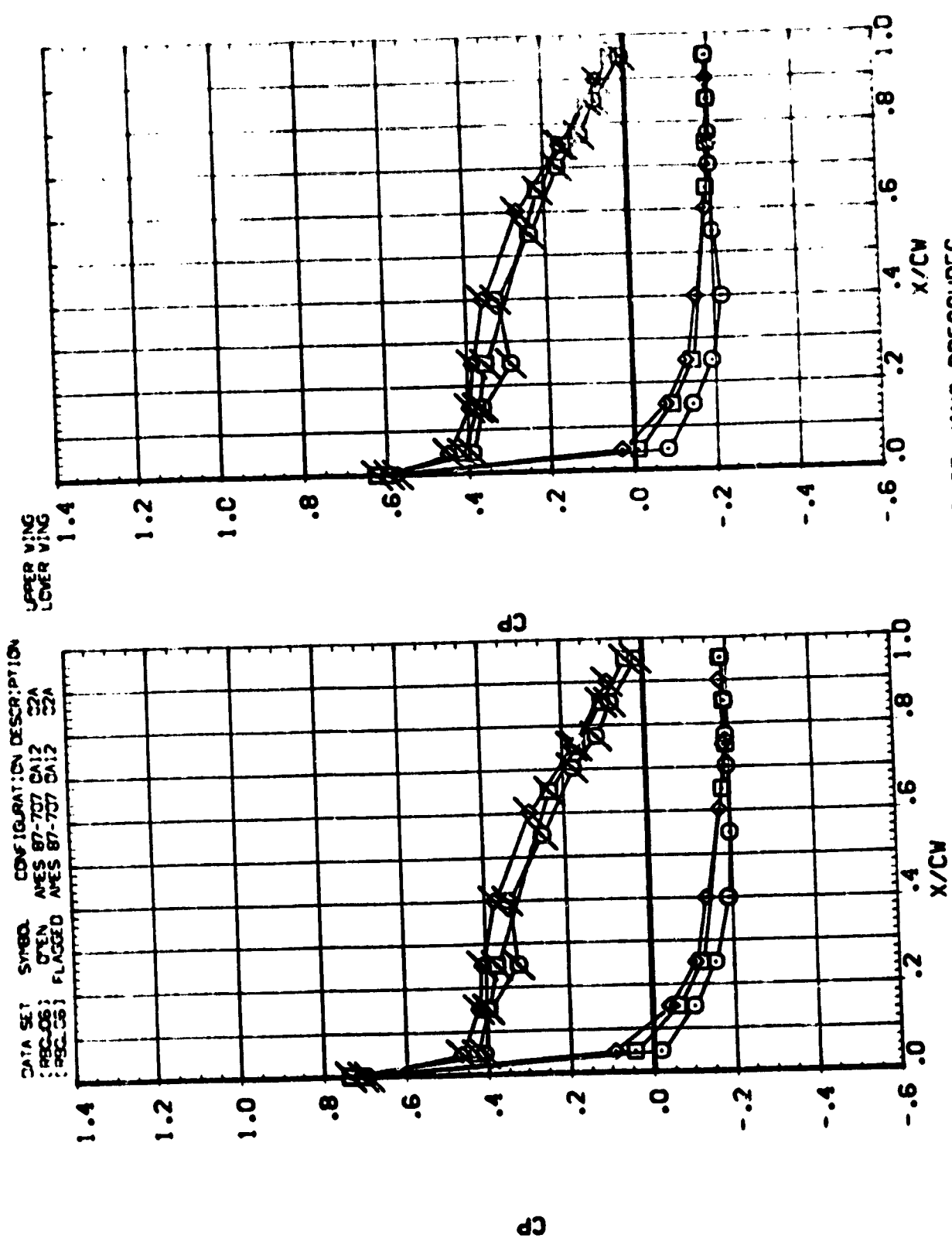


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA 20.000
 ELEVON 20.000
 20.000
 20.000
 20.000

SYMBOL V/BY BETA MACH
 .573 .160 2.458
 .78C 3.020
 .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RECL 05) OPEN AVES 87-707 CA12 22A
 (RECL 06) FLAGGED AVES 87-707 CA12 22A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 10.000 20.000
 10.000 40.000

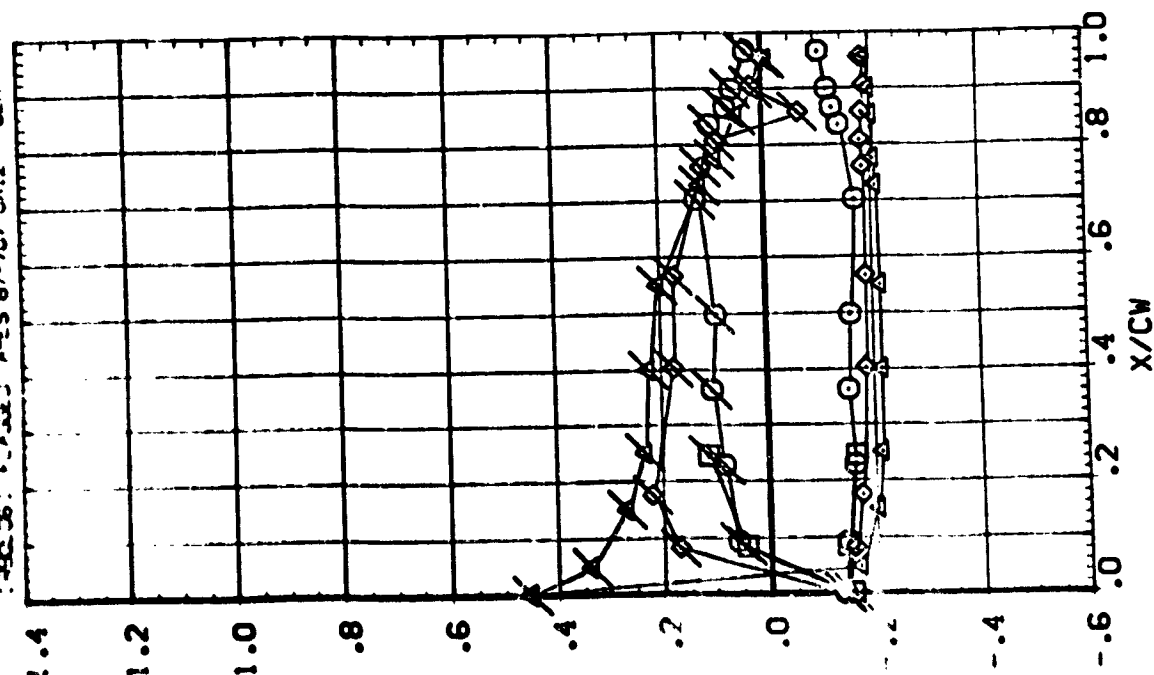
ALPHA
 ELEVON

RETA 6.210 2.498

SYMBOL
 .799
 .364
 .477
 .534

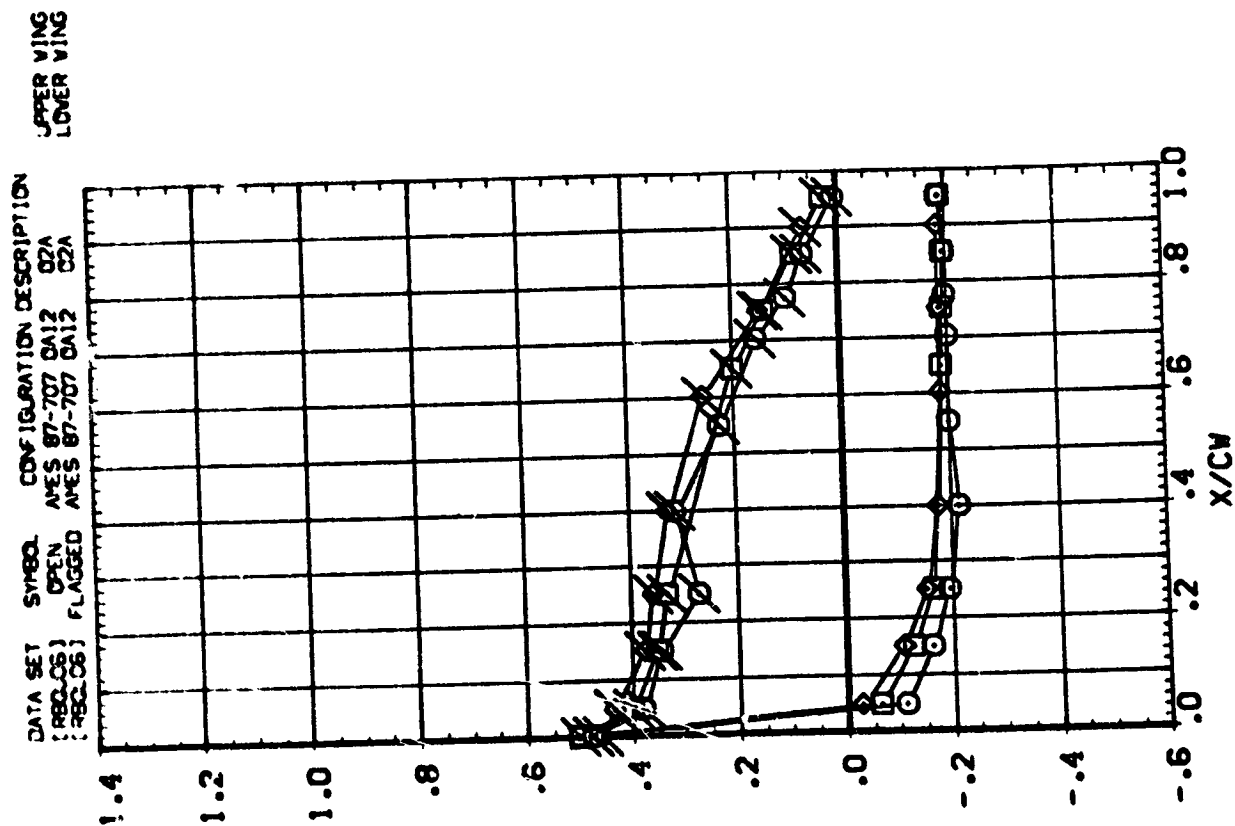
UPPER WING
 LOWER WING

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 800-05 OPEN ASES 87-707 CA12 OZA
 800-06 FLAPPED ASES 87-707 CA12 OZA



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

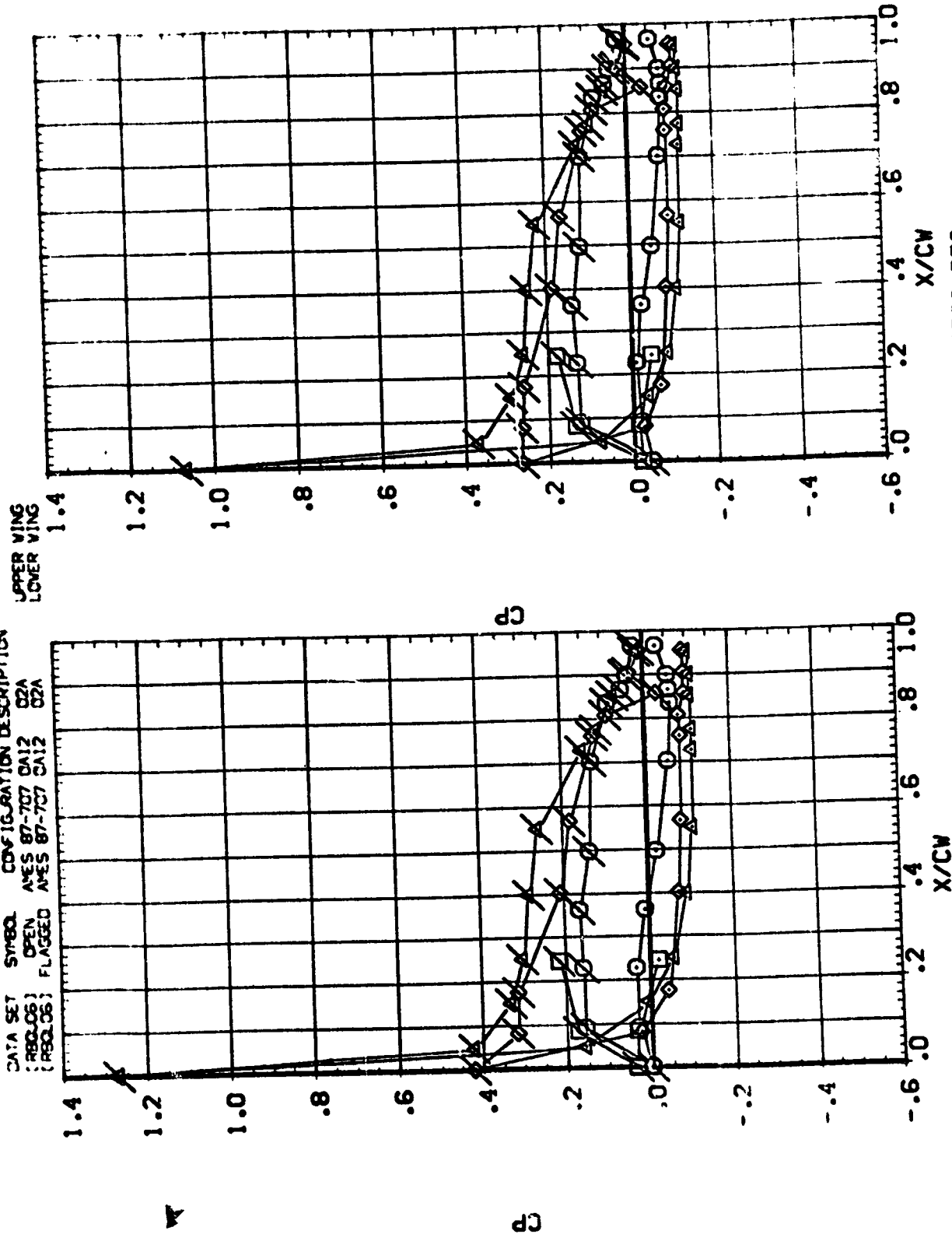


SYMBOL Y/B₀ BETA MACH

.299 -6.750 3.50;
 .364 -3.450
 .477
 .534

PARAMETRIC VALUES
 ALPHA
 ELEVON
 10.000
 .000
 RUDER
 RUDFLR
 -20.000
 40.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RBL06) OPEN AYES 87-707 DA12 D2A
 (RBL06) FLAGGED AYES 87-707 CA12 D2A



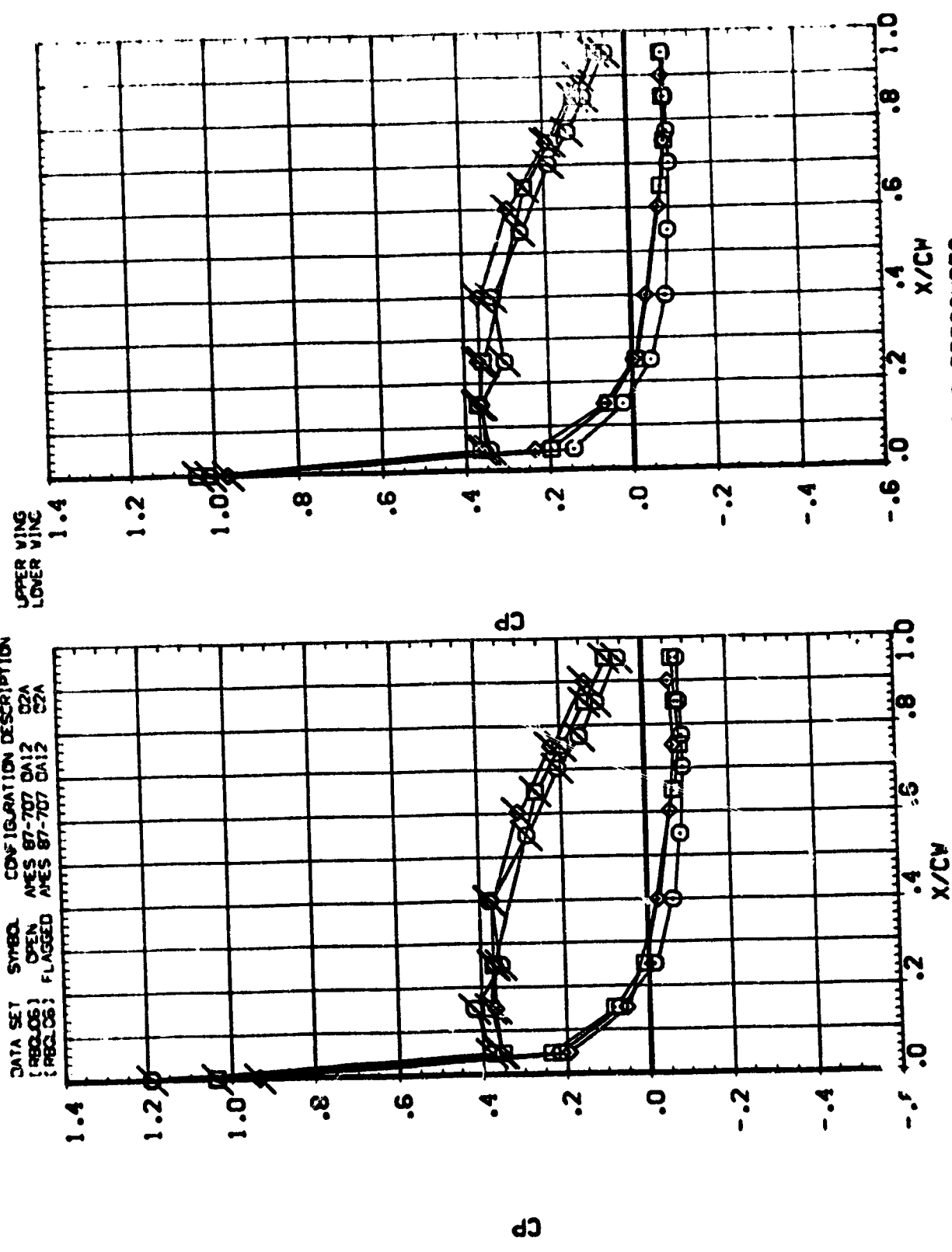
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 10.000 R/DIEP 75.000
 .000 R/DJLR 45.000

ALPHA
 ELEVON

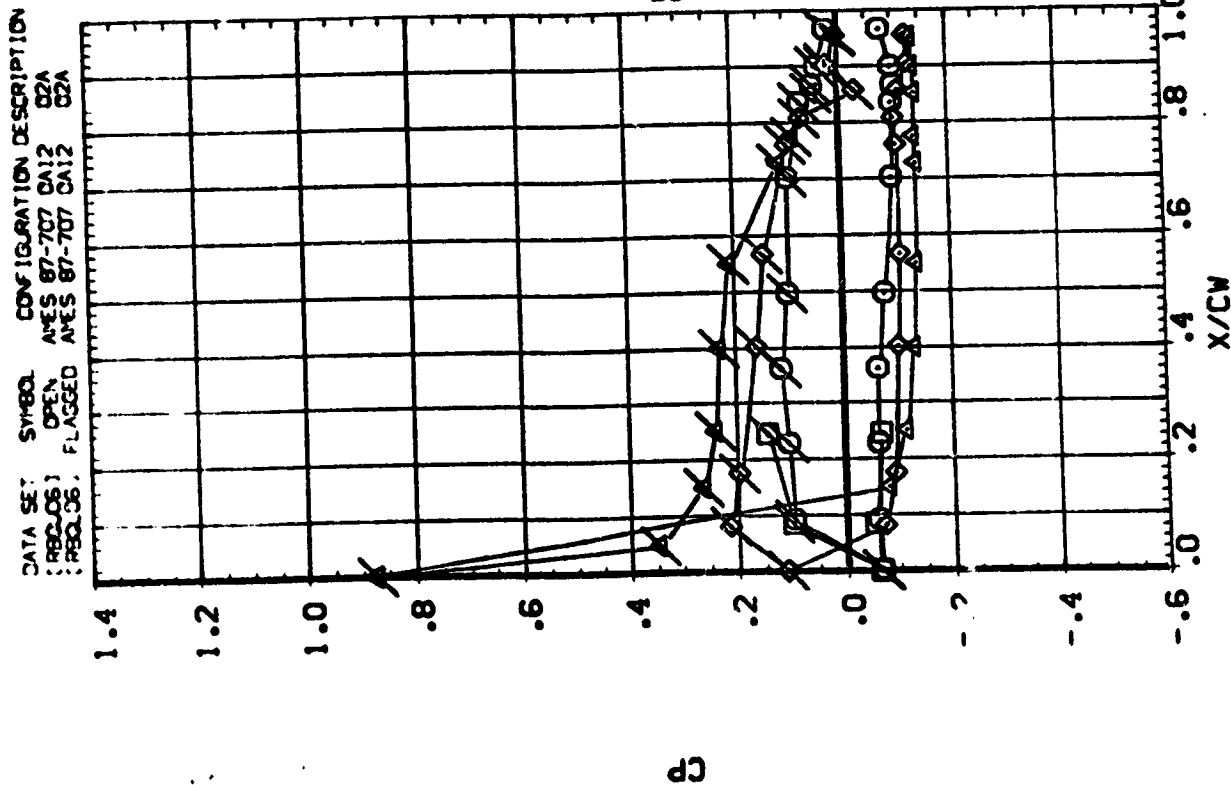
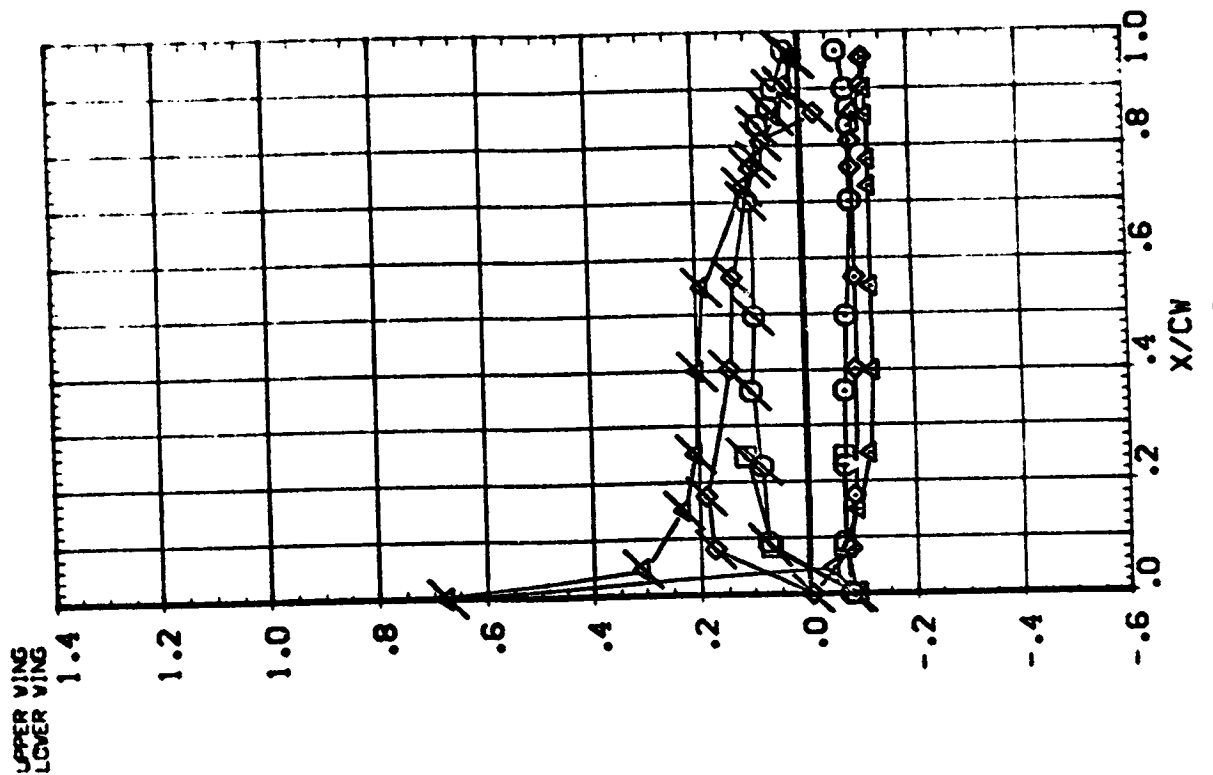
SYMBOL V/BV BETA MACH
 .673 -6.750 3.501
 .780 -3.45C
 .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [REQLOS] OPEN AYES 87-707 DAI2 C2A
 [REQLOS] FLAGGED AYES 87-707 DAI2 C2A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

HALLING W. W. J. J.
 ALPHA
 ELEVON
 15.000
 .000
 20.000
 40.000

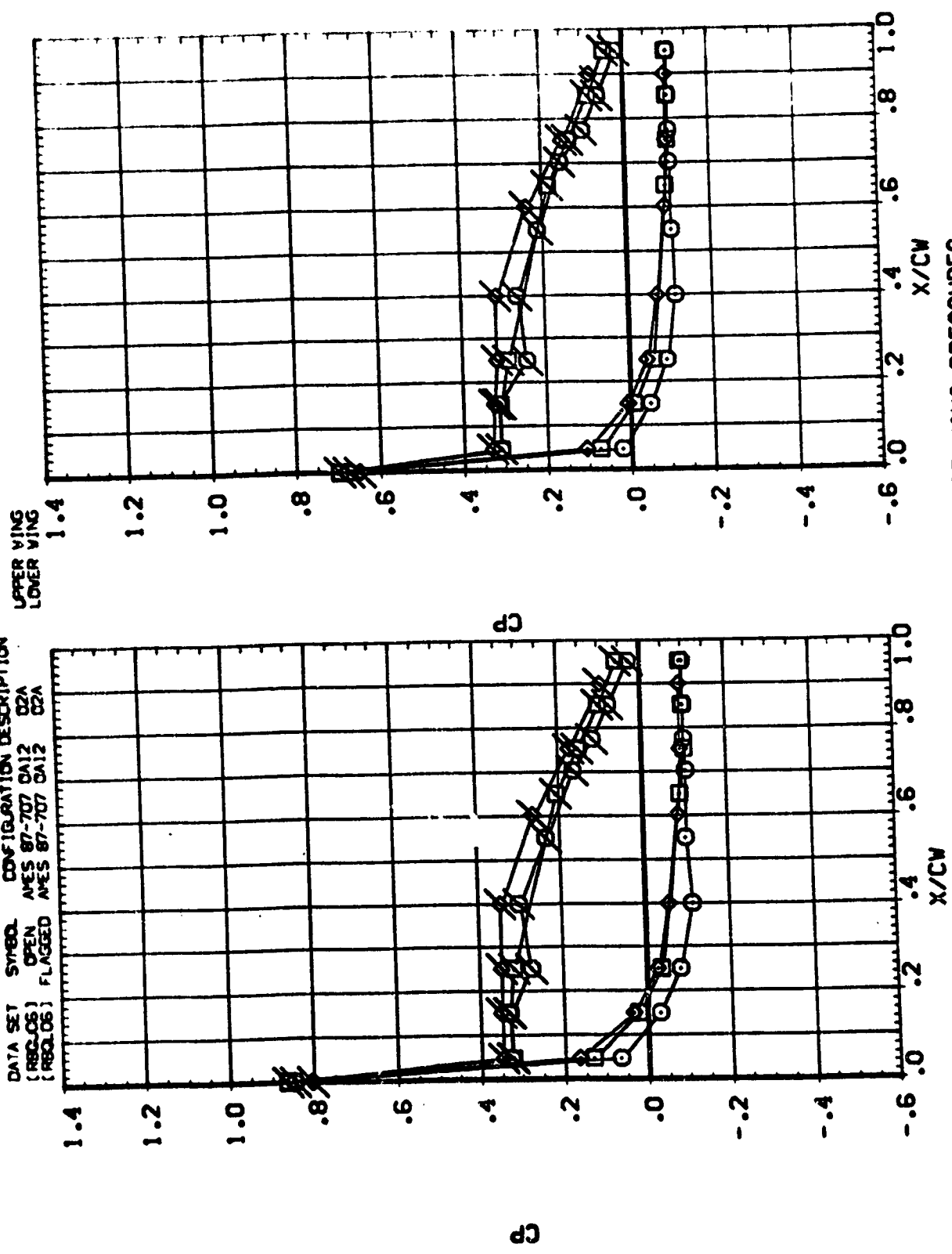


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA 10.000 RUDER 20.000
 ELEVON .000 RUDLR 40.000

SYMBOL V/BV BETA MACH
 .573 .160 3.501
 .780 3.140
 .887

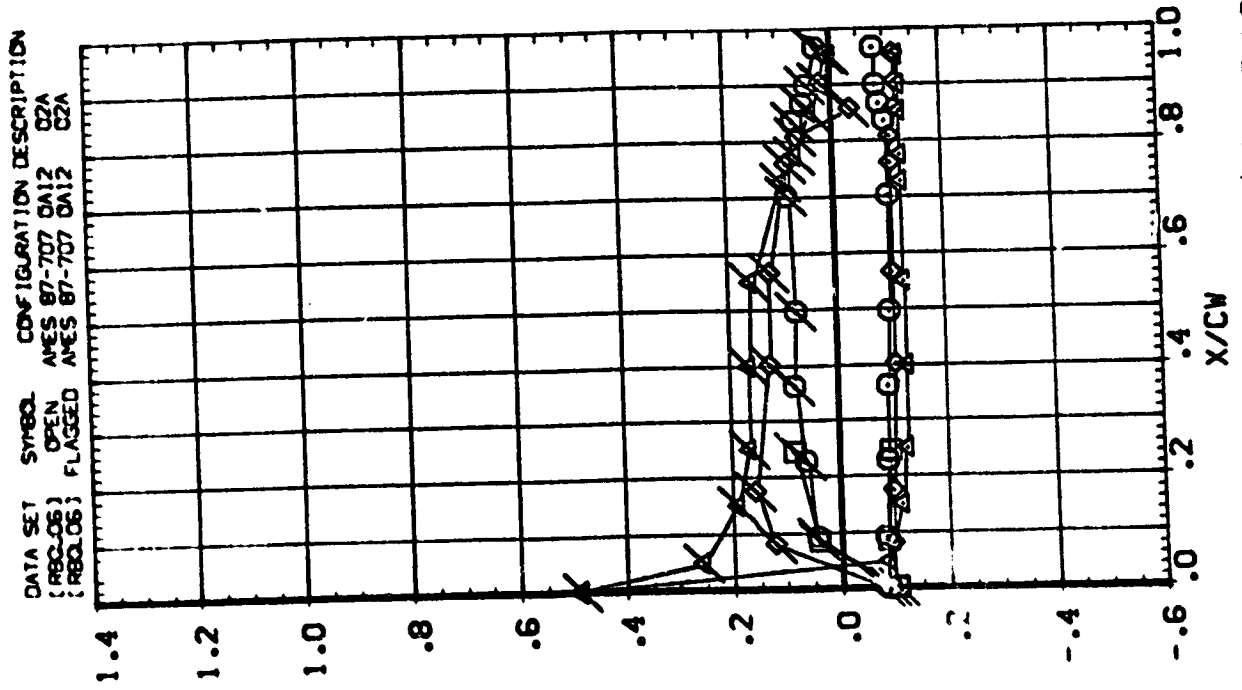
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R8CJ06) OPEN ARES 87-707 DA12 Q2A
 (R8CJ06) FLAGGED ARES 87-707 DA12 Q2A



PARAMETRIC VALUES
 ALPHA 10.000 RUDDER -20.000
 ELEVON .000 RUDF.R 40.000

SYMBOL Y/BN BETA MACH
 .299 6.440 3.501
 .364
 .427
 .534

UPPER WING
 LOWER WING

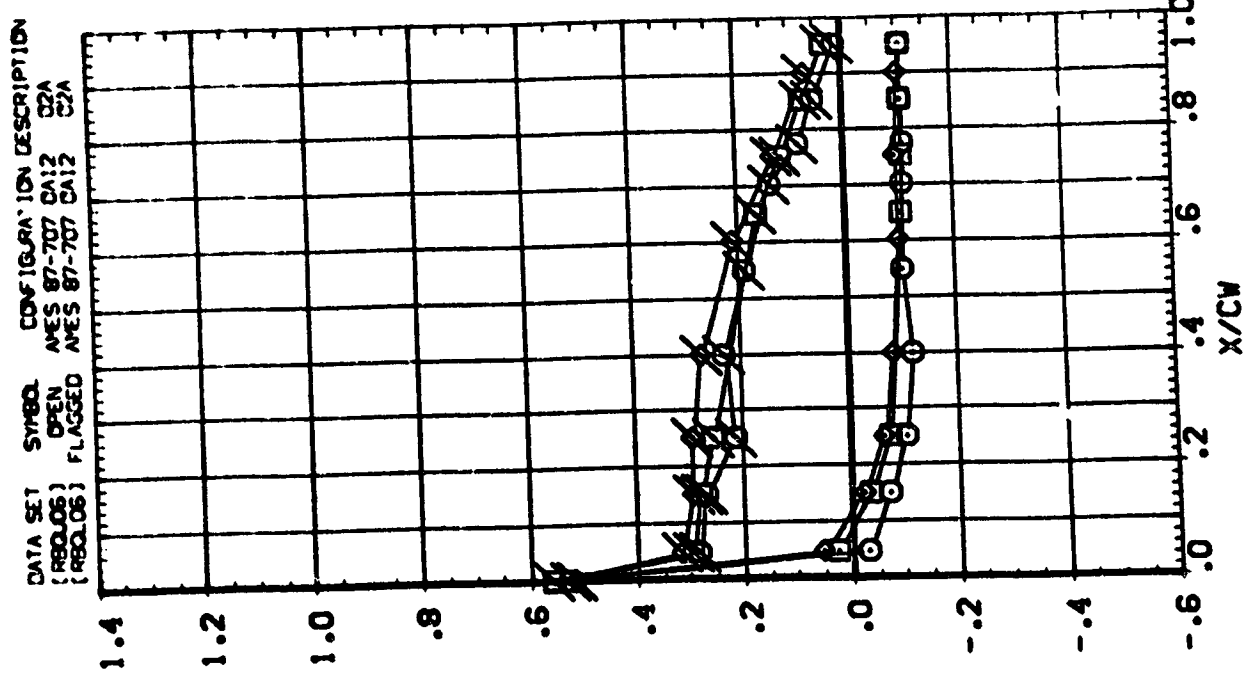


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA 10.000 RJO_P 40.000
 ELEVON .000 RJO_P 40.000

SYMBOL Y/BV BETA MACH
 .573 6.440 3.501
 .78C
 .887

UPPER WING
 LOWER WING

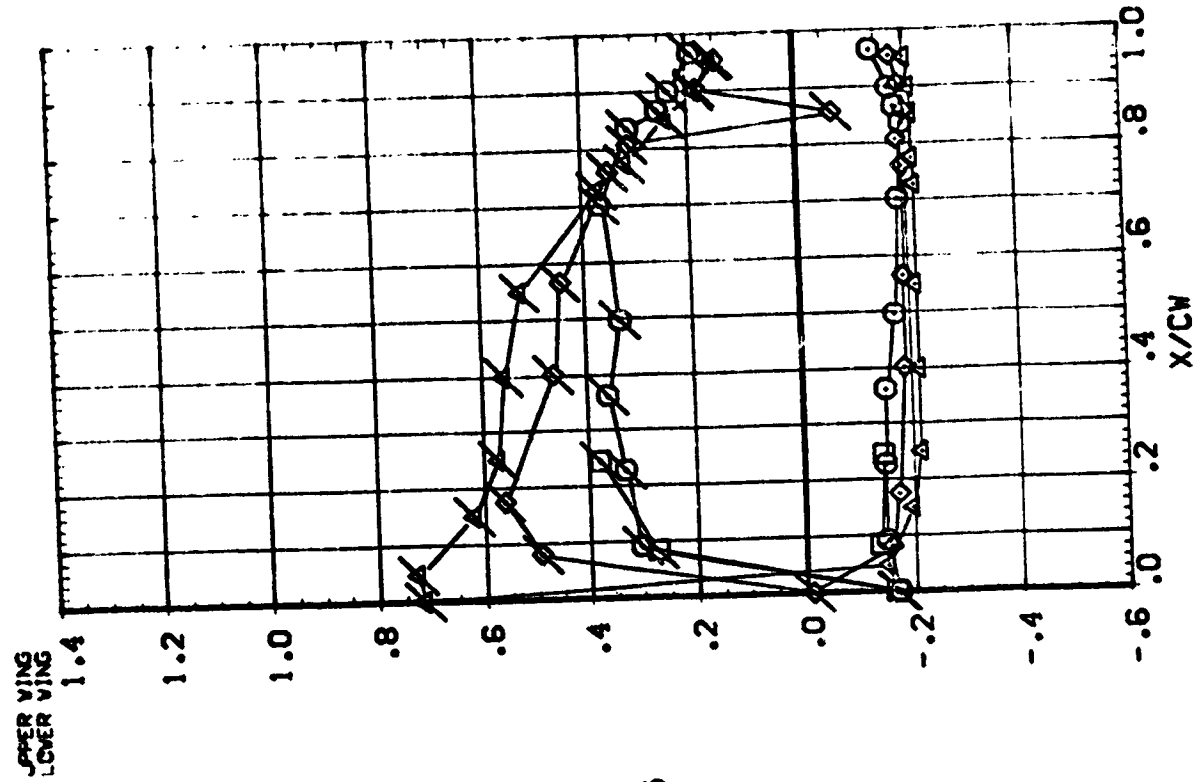
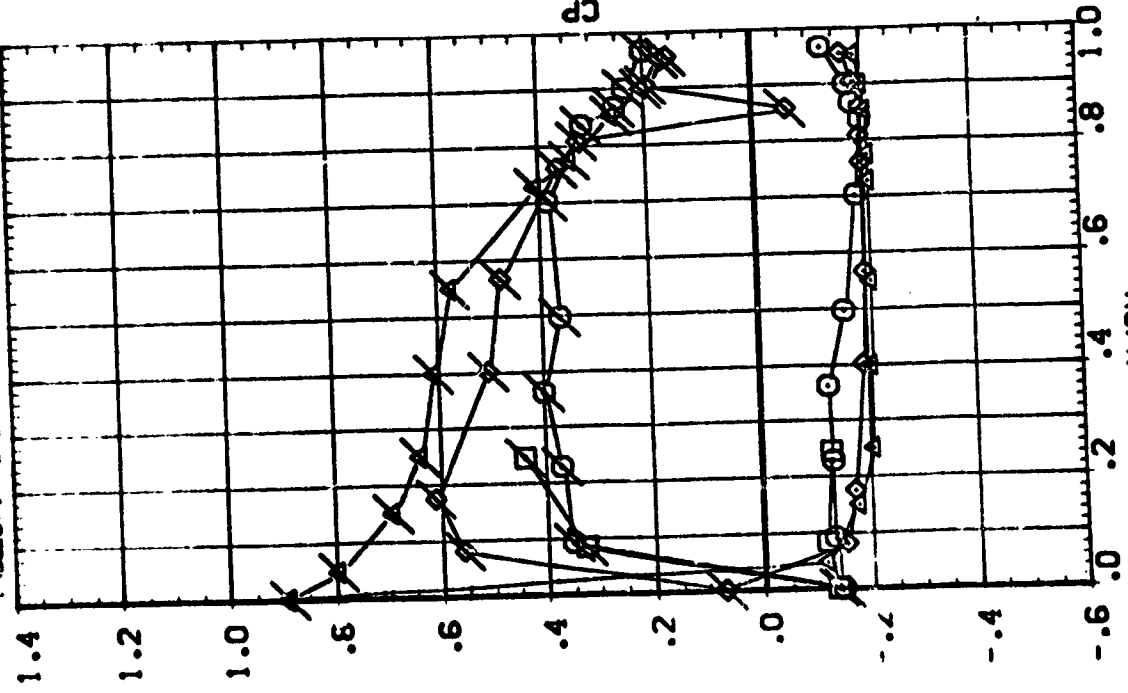


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

SYMBOL Y/B_u BETA MACH
 O .299 -6.480 2.198
 X .364 -3.370
 A .427
 A .534

PARAMETRIC VALUES
 ALPHA 20.000 20.000
 ELEVON .000 RUDER 40.000
 RUDER

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REJECT) OPEN AMES 87-707 DA12 C2A
 (REJECT) FLAGGED AMES 87-707 DA12 C2A

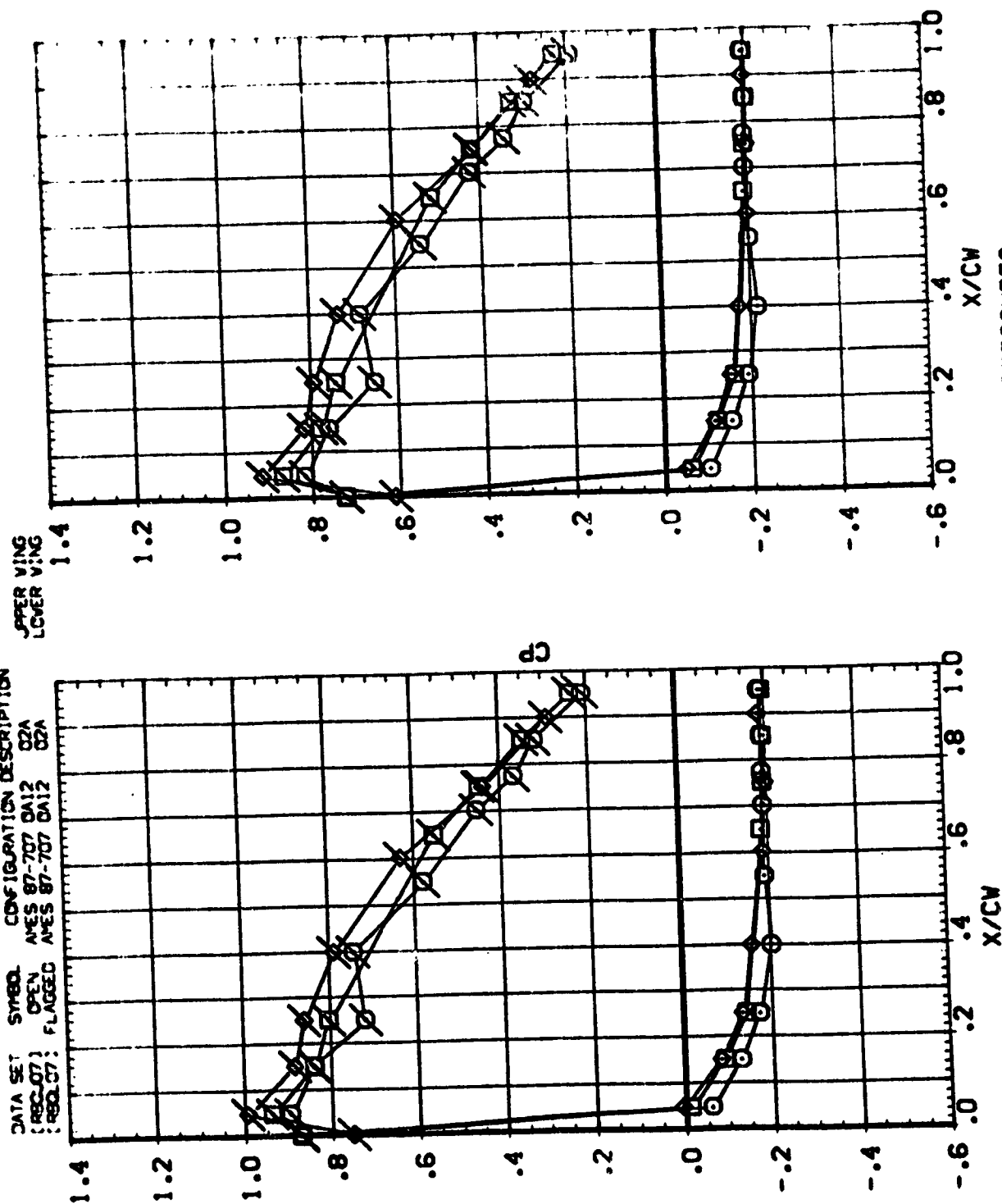


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA 20.000 20.000 20.000
 ELEVON .000 20.000 40.000

SYMBOL Y/BV BETA MACH
 .673 -6.480 2.498
 .780 -3.320
 .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REQ 07) OPEN ANES 87-707 DA12 Q2A
 (REQ 07) FLAGGED ANES 87-707 DA12 Q2A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES



SYMBOL
 > \diamond \square \triangle

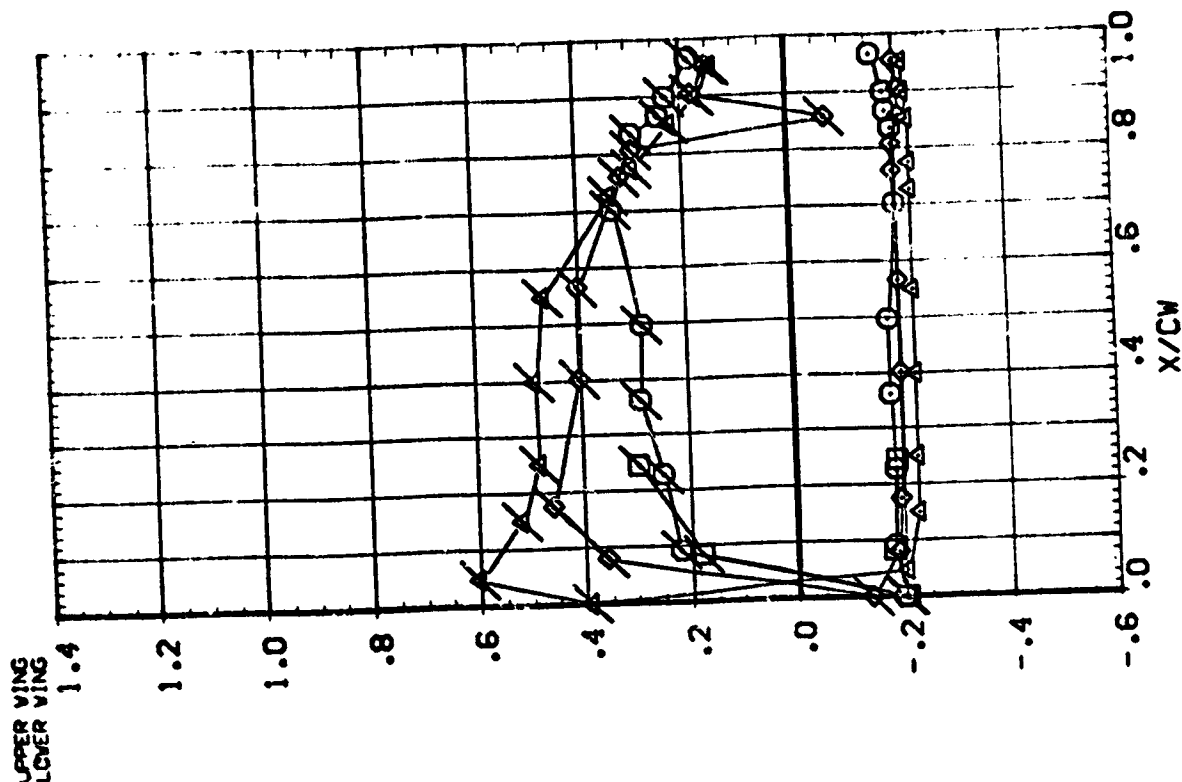
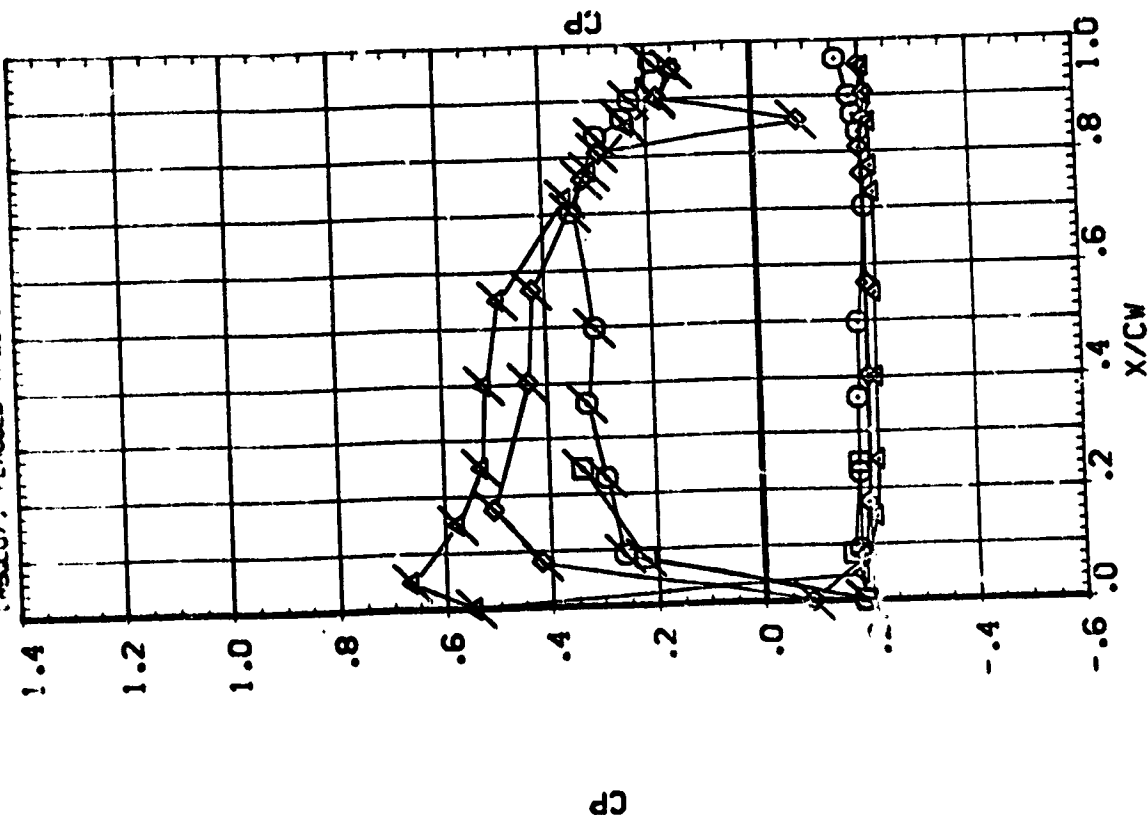
Y/BN
 .299
 .364
 .427
 .534

BETA
 -.150
 3.040

MACH
 2.498

PARAMETRIC VALUES
 ALPHA
 ELEVON
 20.000
 .000
 20.000
 45.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R80.07) OPEN APES 87-707 CA12 OZA
 (R80.07) FLAGGED APES 87-707 CA12 SZA

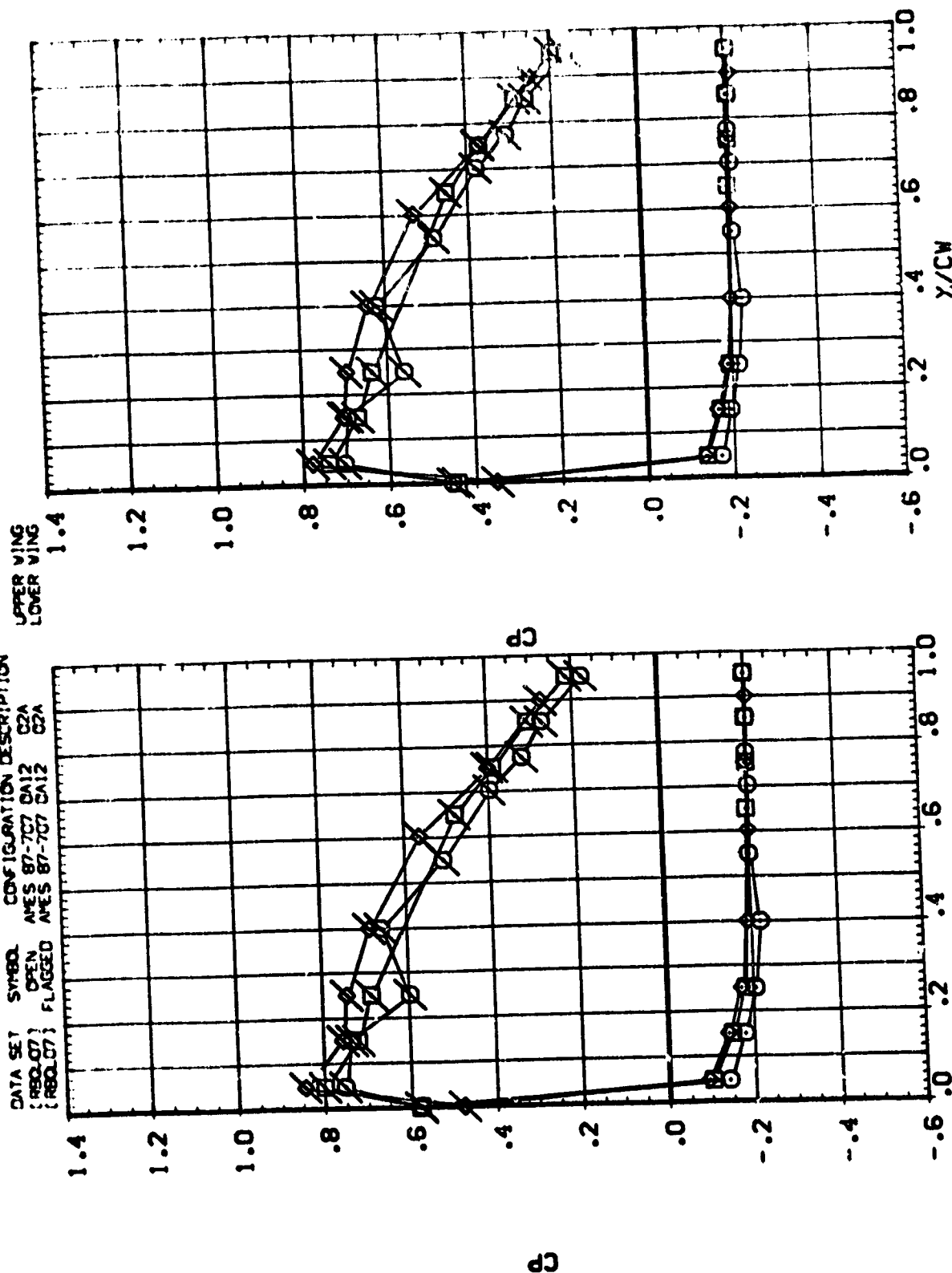


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA 70.000
 ELEVON 0.000
 RUDER 70.000
 RUDLR 40.000

SYMBOL V/BV BETA MAC-1
 .675 .150 2.498
 .780 3.043
 .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REQ.07) OPEN AMES 87-707 CA12 C2A
 (REQ.07) FLAGGED AMES 87-707 CA12 C2A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES



SYMBOL Y/BV
O 110
110
110
110

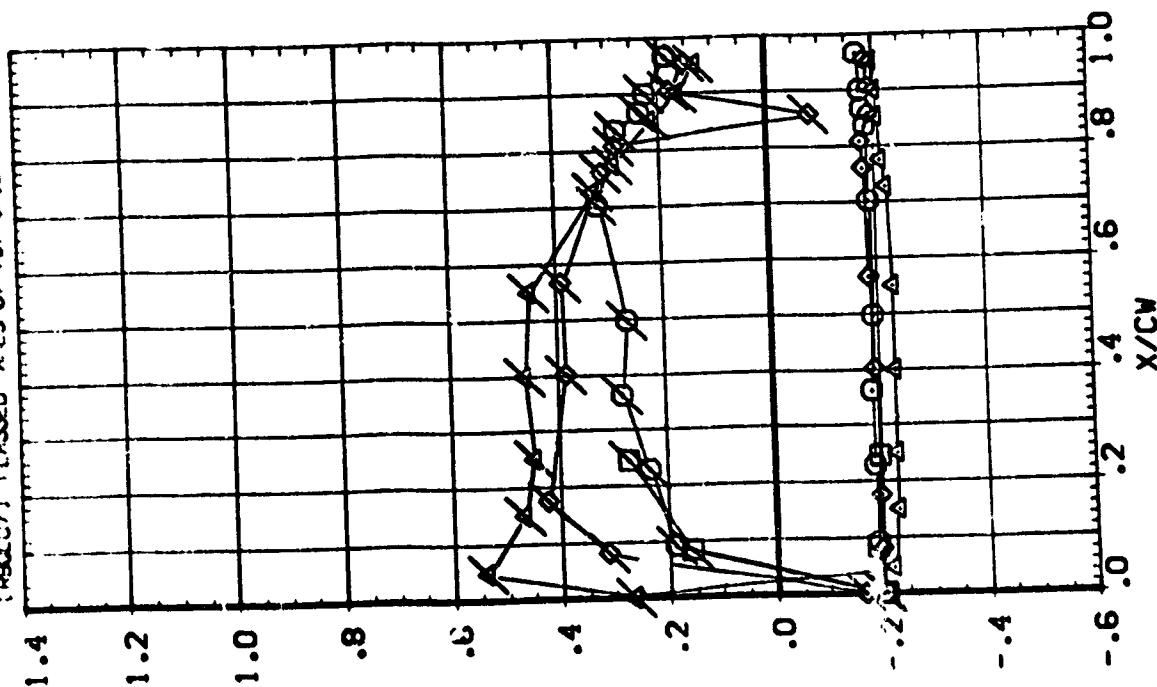
BETA 6.24C
WACH 2.498

PARAMETRIC VALUES
20.000 RJOER -20.000
.000 RJOELR 40.000

ALPHA
ELEVON

DATA SET: SYMBOL CONFIGURATION DESCRIPTION
(RSC07) OPEN AYES 87-707 CA12 C2A
(RSC07) FLAGGED AYES 87-707 CA12 C2A

UPPER WING
LOWER WING

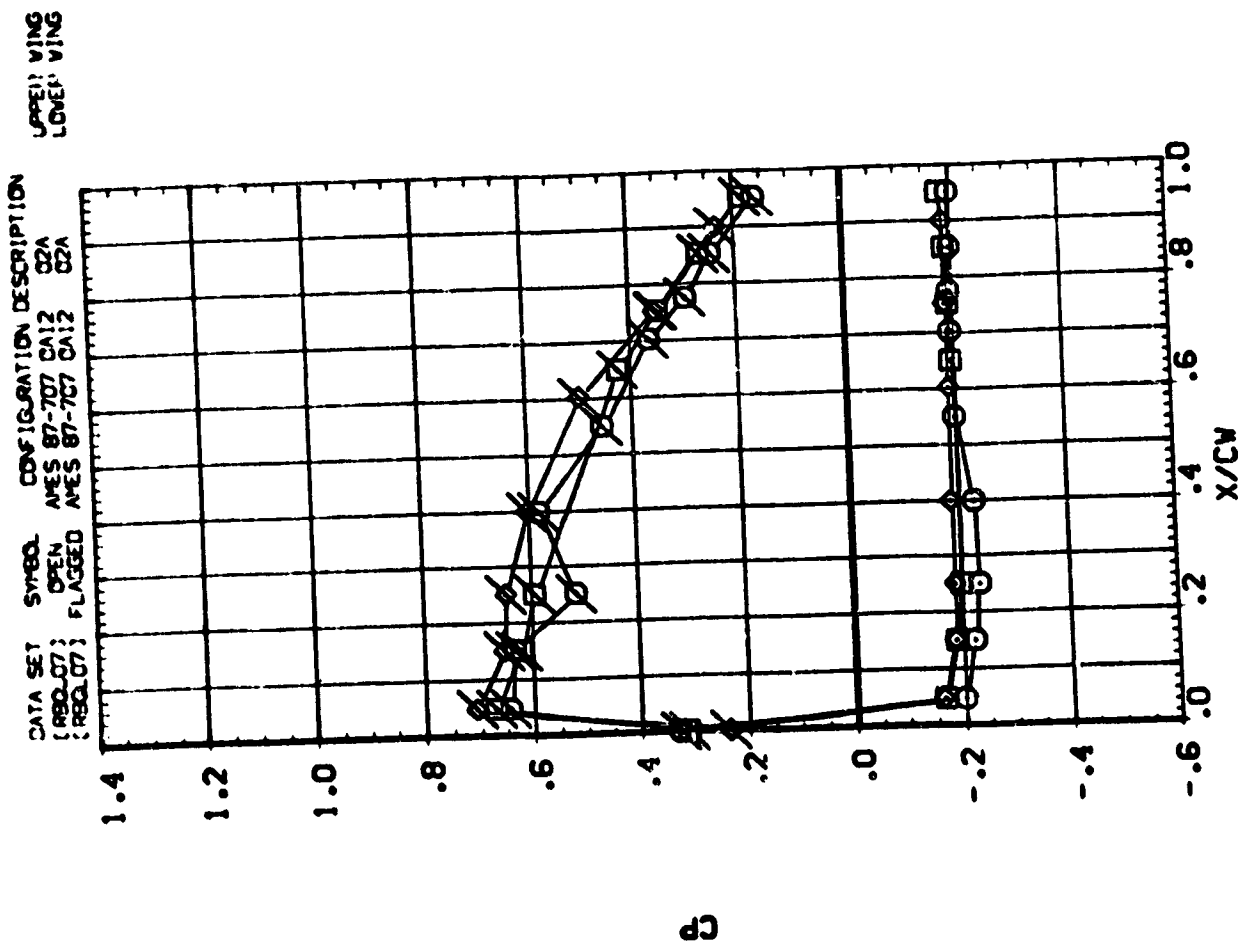


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 20.000 R0012 20.000
 .000 R0012 40.000

ALPHA
 ELEVON

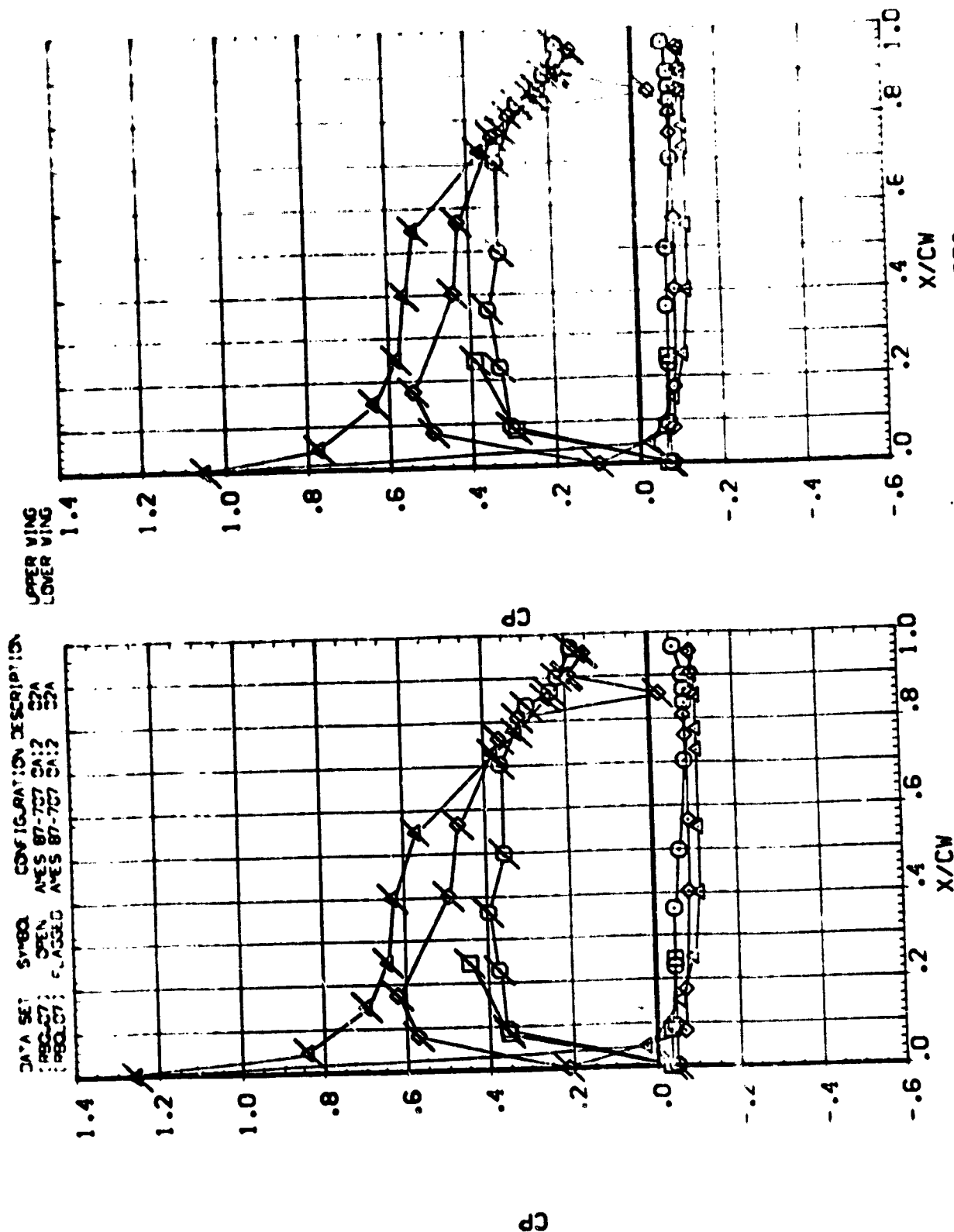
SYMBOL Y/BV BETA MAC
 .673 6.240 2.498
 .780
 .887



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

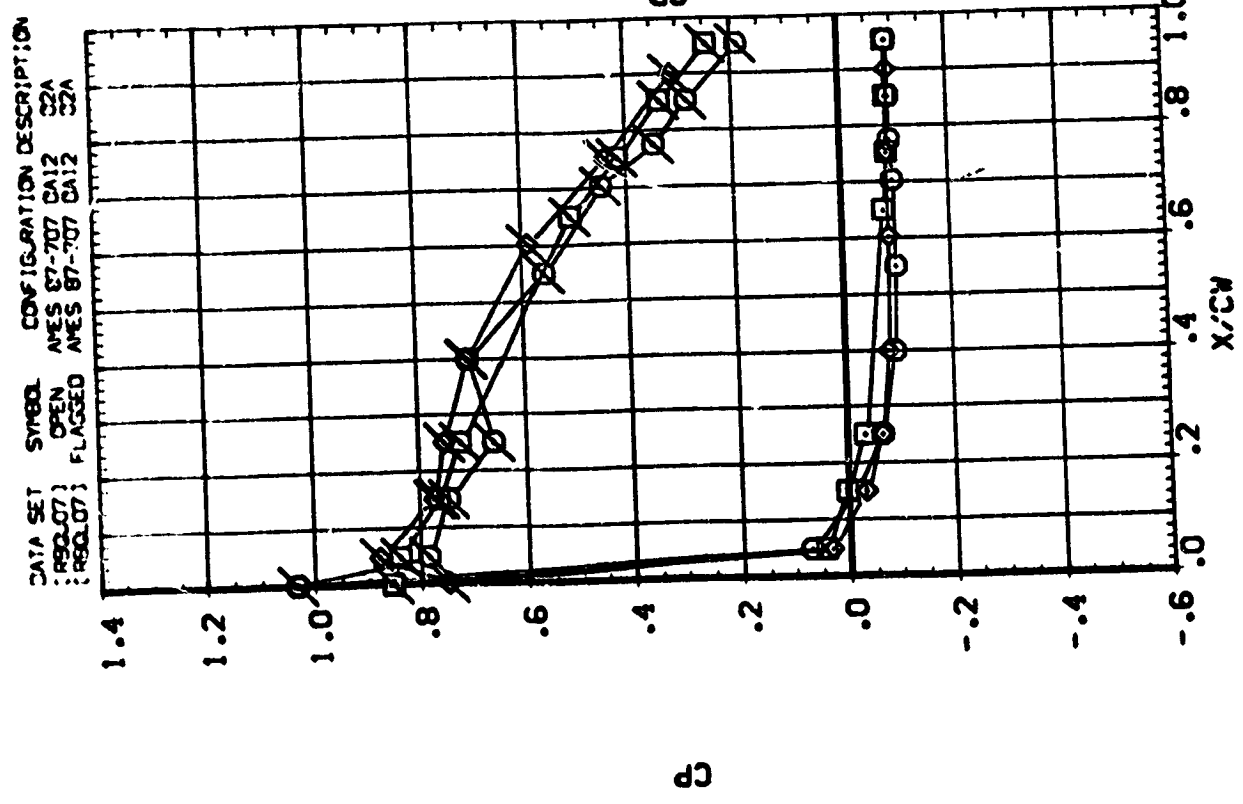
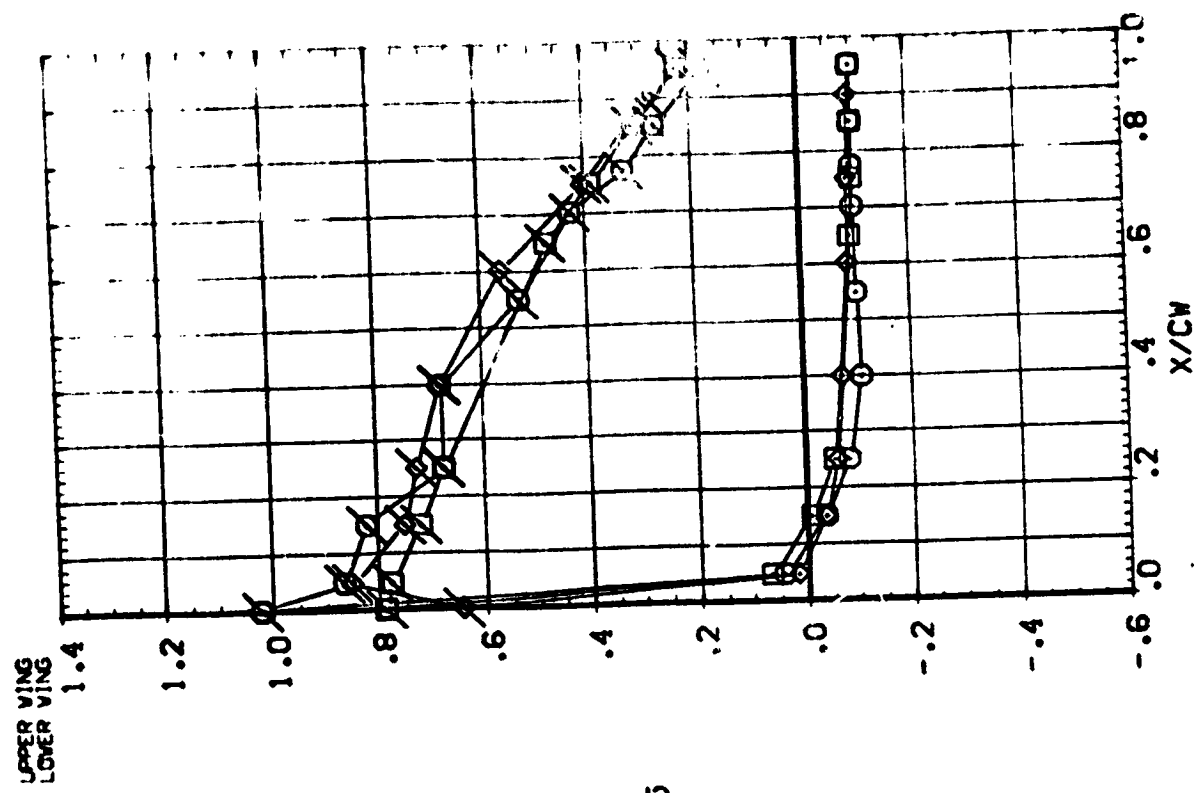
ALPHA
 ELEVON
 20.000
 0.000
 0.000
 0.000
 0.000
 0.000

SYMBOL
 1/30
 .299
 .364
 .427
 .534
 BETA
 -6.710
 3.440
 MACH
 3.500



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA 20.000
 ELEVON .000
 RUDER 20.000
 RUD. 9 40.000



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 :REQ.07 OPEN AMES 87-707 CA12 32A
 :REQ.07 FLAGGED AMES 87-707 CA12 32A

SYMBOL V/BM BETA MACH
 .673 -6.710 3.50:
 .78C -3.44C
 .887

CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES

20.000 RUDER
.000 RUDLR

ALPHA
ELEVON

BETA MACH

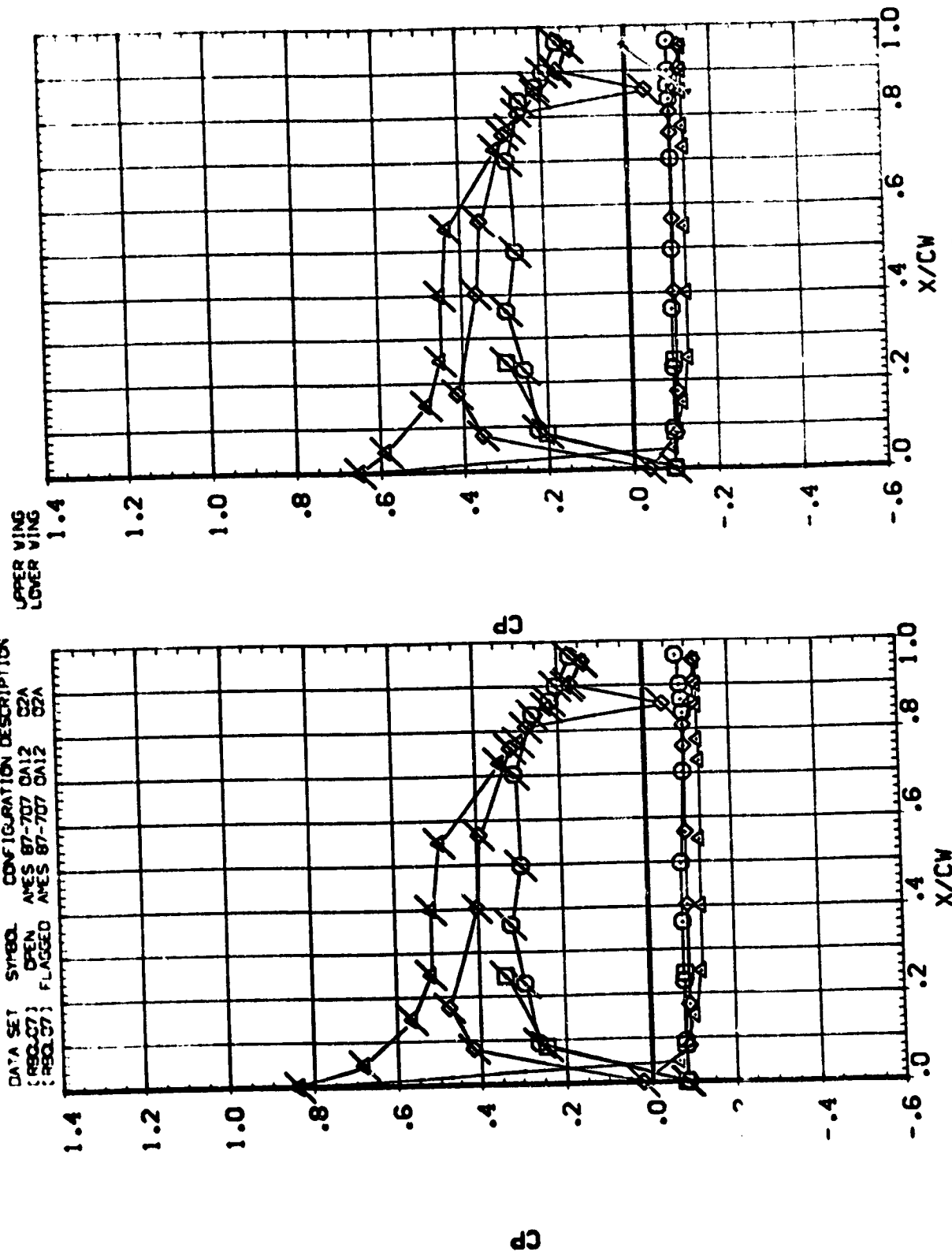
-.150 3.501

Y/BU .299
.364
.427
.534

SYMBOL
O
□
◇
△

DATA SET SYMBOL CONFIGURATION DESCRIPTION

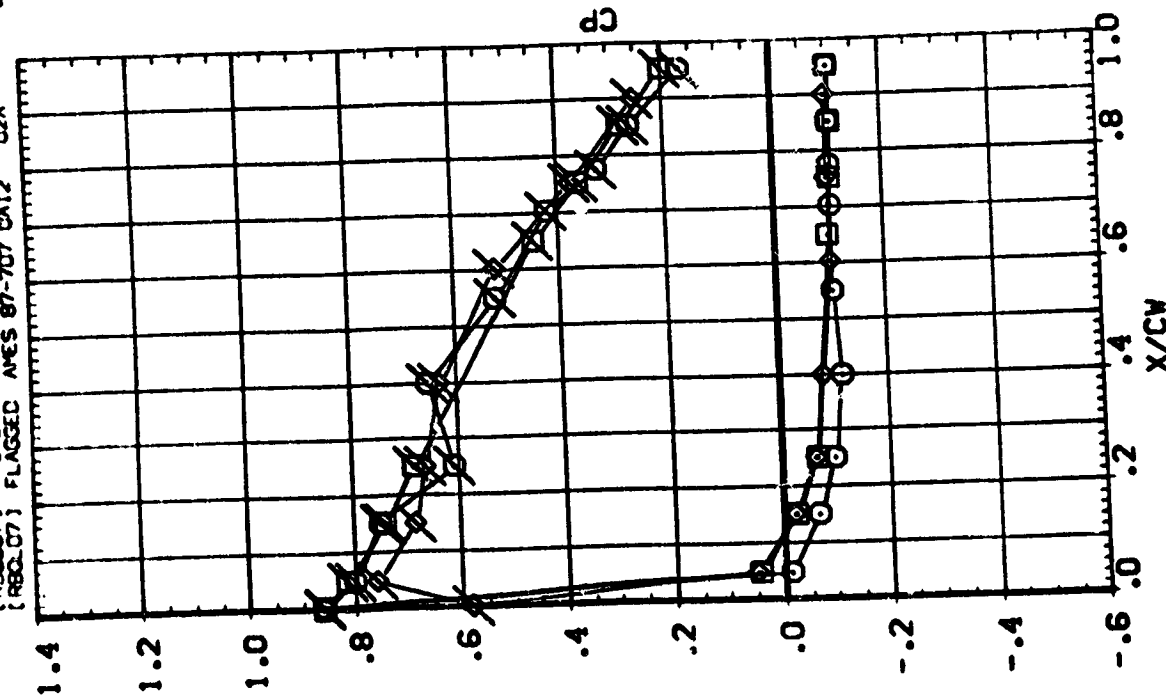
REG-07 OPEN ANES 87-707 OA12 O2A
REG-07 FLAGGED ANES 87-707 OA12 O2A



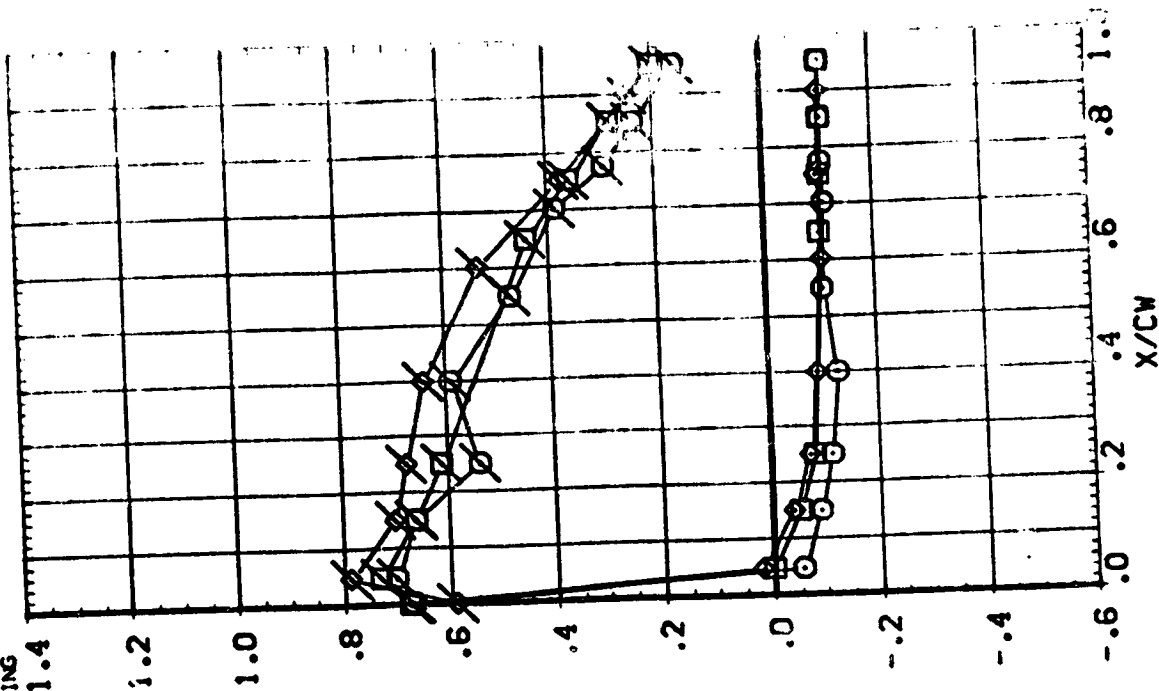
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

...in

DATA SET	SYMBOL	CONFIGURATION	DESCRIPTION
(190107)	OPEN	ANES 87-707 CA12	C2A
(190107)	FLAGGED	ANES 87-707 CA12	C2A



UPPER VING
LOWER VING



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES



SYMBOL
○ □ ◇ △

Y/BN .299
.364
.427
.534

BETA 6.47C

MACH 3.501

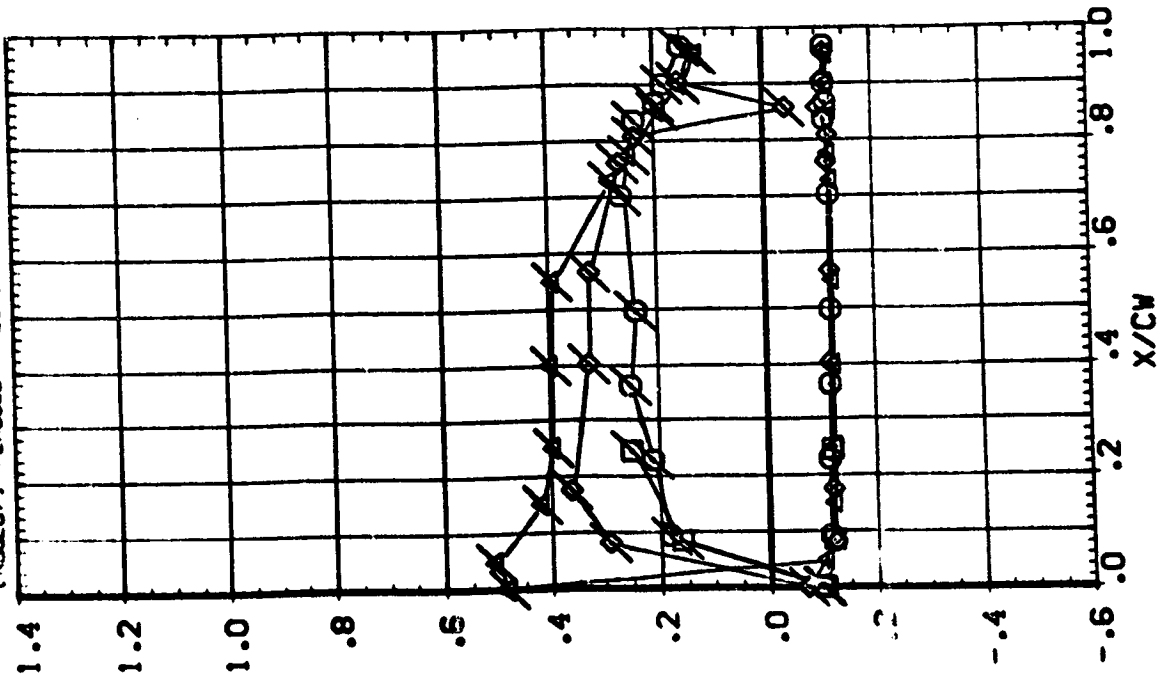
PARAMETRIC VALUES

ALPHA 20.000
ELEVON .000

RUDDER -7C.00C
RUDLR 4C.00C

UPPER WING
LOWER WING

DATA SET SYMBOL CONFIGURATION DESCRIPTION
(REQ.07) OPEN ANES 87-707 OA12 O2A
(REQ.07) FLAGGED ANES 87-707 OA12 O2A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

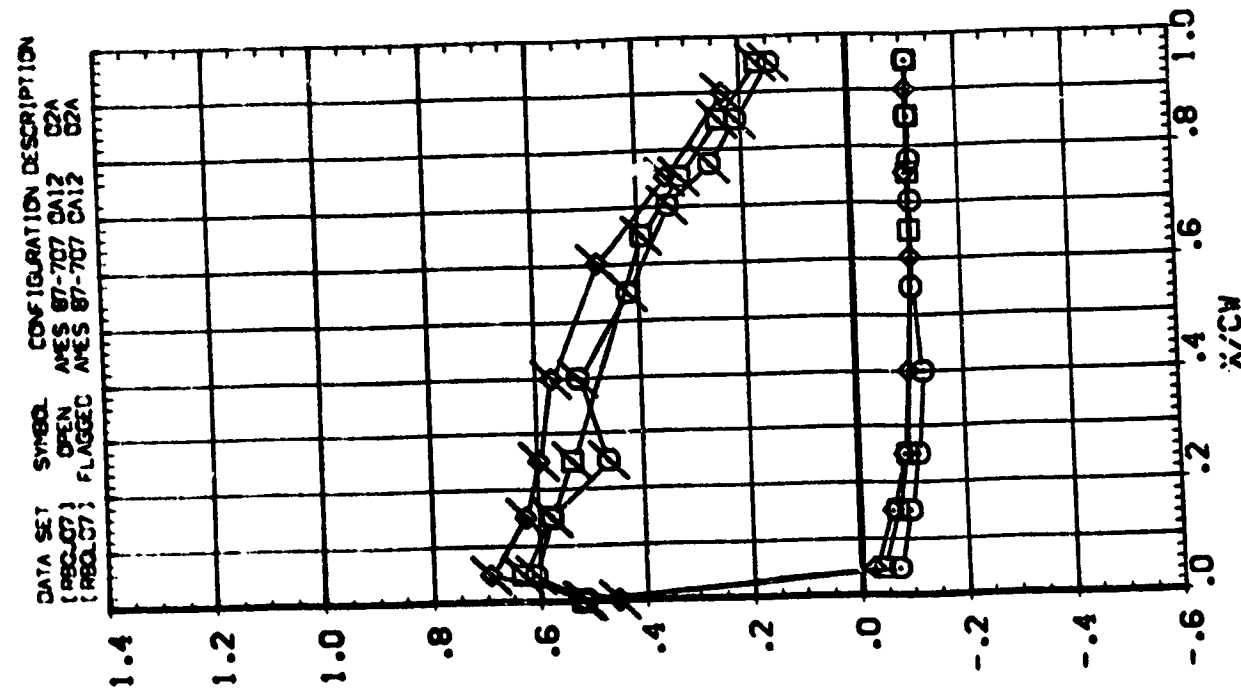
PARAMETRIC VALUES

ALPHA	20.000	RJDR	70.000
ELEVON	.000	RJDR	40.000

SYMBOL V/BW BETA MACH

□	.573	6.470	3.501
□	.780		
◇	.887		

UPPER WING
LOWER WING

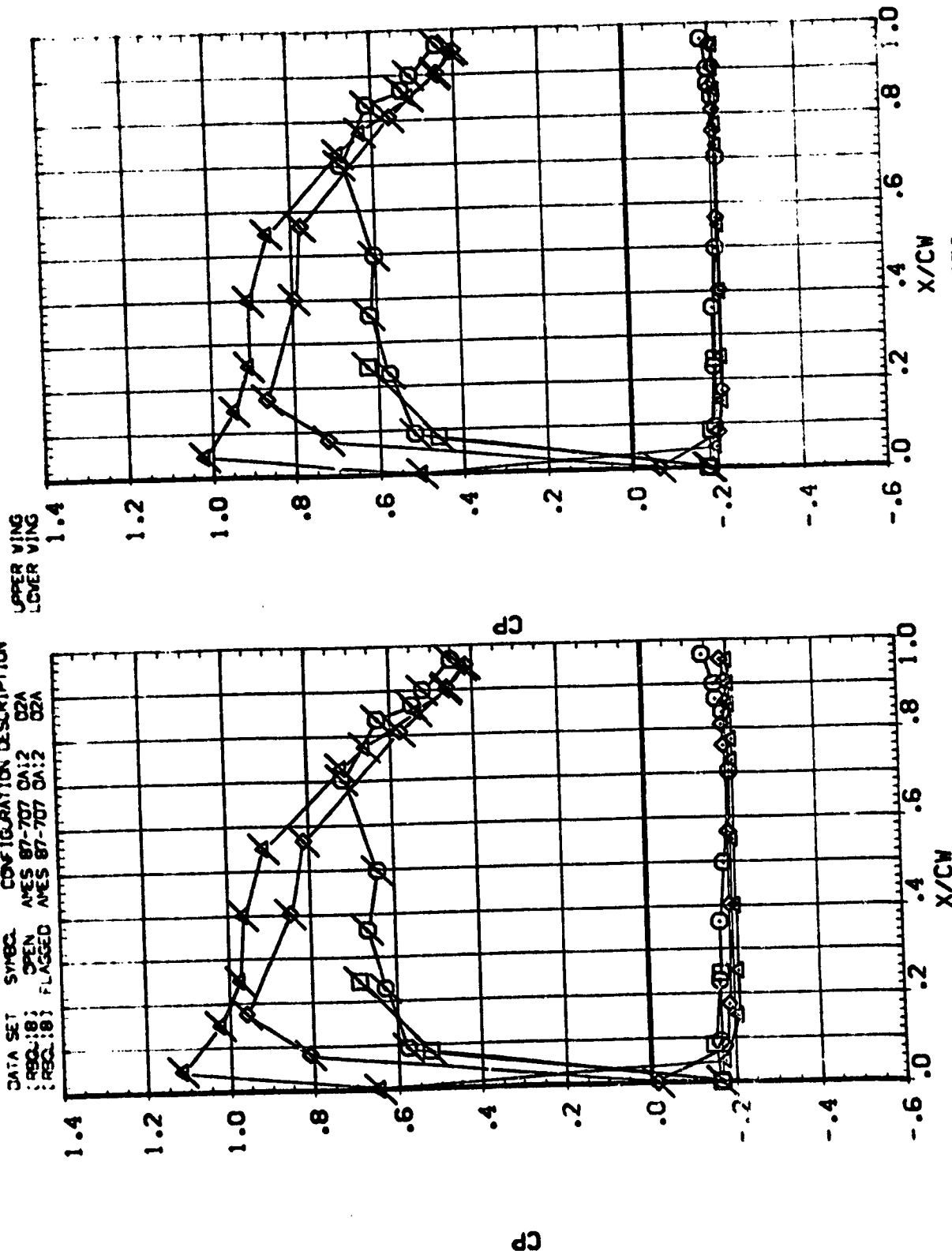


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA 30.000 RUDDER .000
 ELEVON .000 RUDFLR 40.000

SYMBOL Y/B₀ BETA MACH
 .759 -6.480 2.498
 .364 -3.310
 .427
 .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 :REQ:8 : OPEN AMES 87-707 OA:2 OZA
 :REQ:8 : FLAGGED AMES 87-707 OA:2 OZA

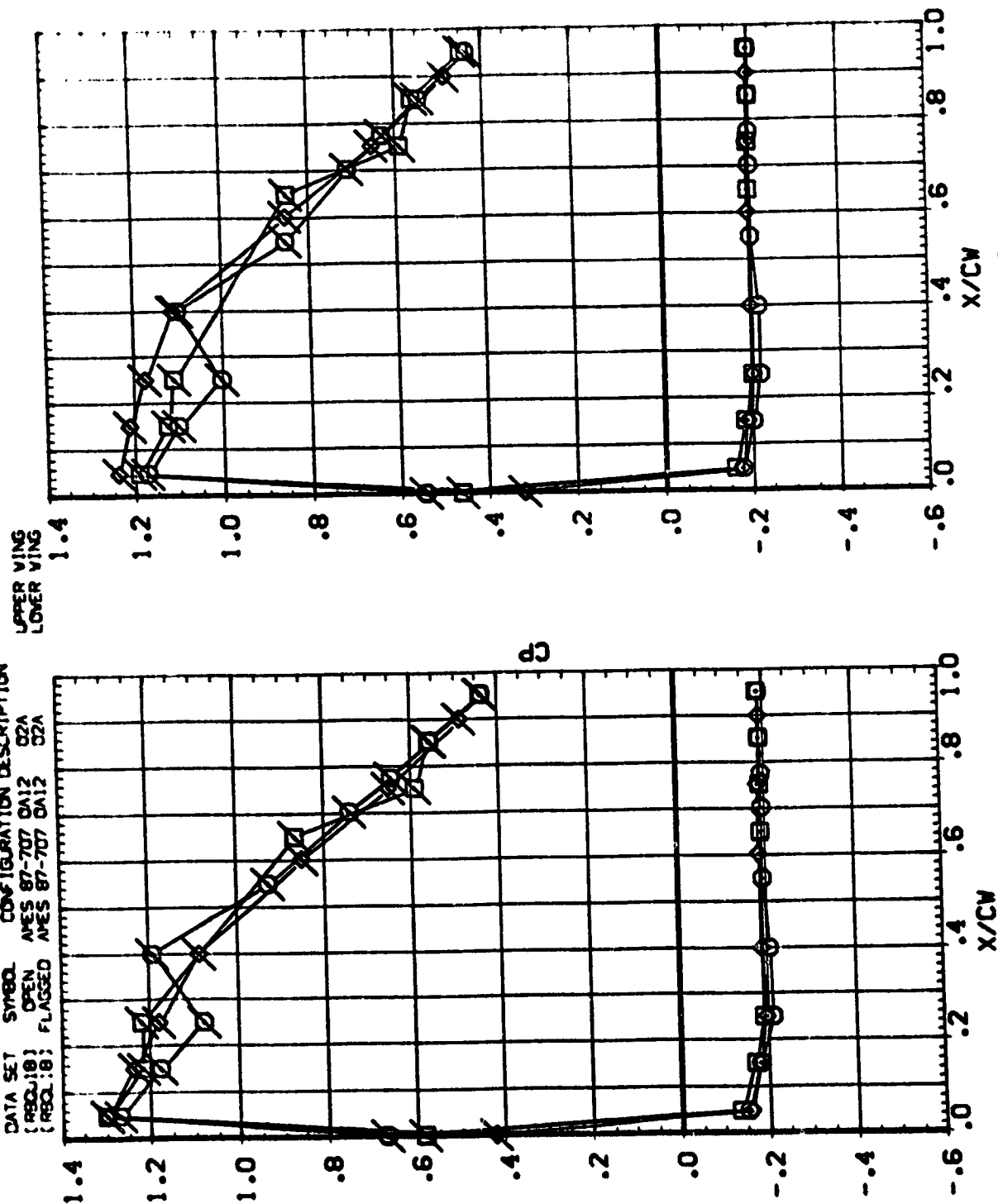


SYMBOL V/BV BETA MACH
 .673 -6.48C 2.458
 .78C -3.31C
 .887

ALPHA
ELEVON

PARAMETRIC VALUES
 30.00C RUDDER .00C
 .000 RUD L 40.00C

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REQ:18) OPEN AVES 87-707 DAI2 02A
 (REQ:18) FLAGGED AVES 87-707 DAI2 02A





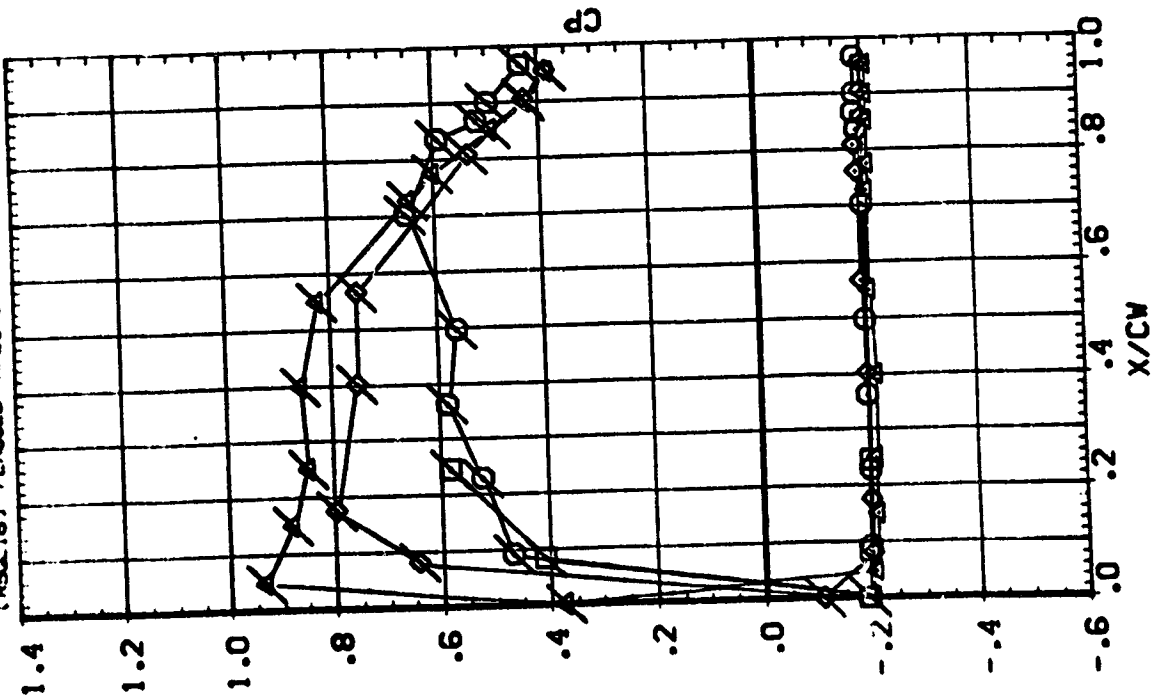
SYMBOL
 0
 1
 2
 3
 4
 5

SYMBOL
 .799
 .364
 .427
 .534

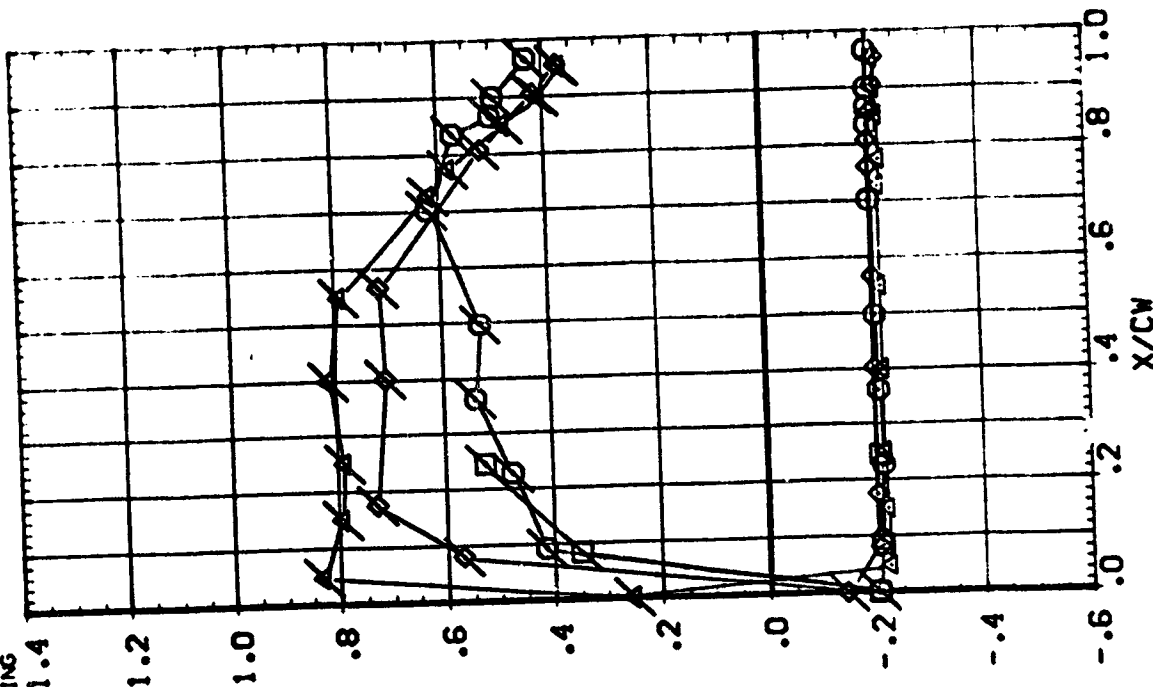
BETA
 -.130
 3.050

MACH
 2.498

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RSC-18) OPEN AYES 87-707 CA12 C2A
 (RSC-18) FLAGGED AYES 87-707 CA12 C2A



UPPER WING
 LOWER WING



PARAMETRIC VALUES
 ALPHA
 ELEVON
 30.000
 .000
 40.000
 .000
 .000

CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 30.000 RUDER 40.000
 .000 RUDER

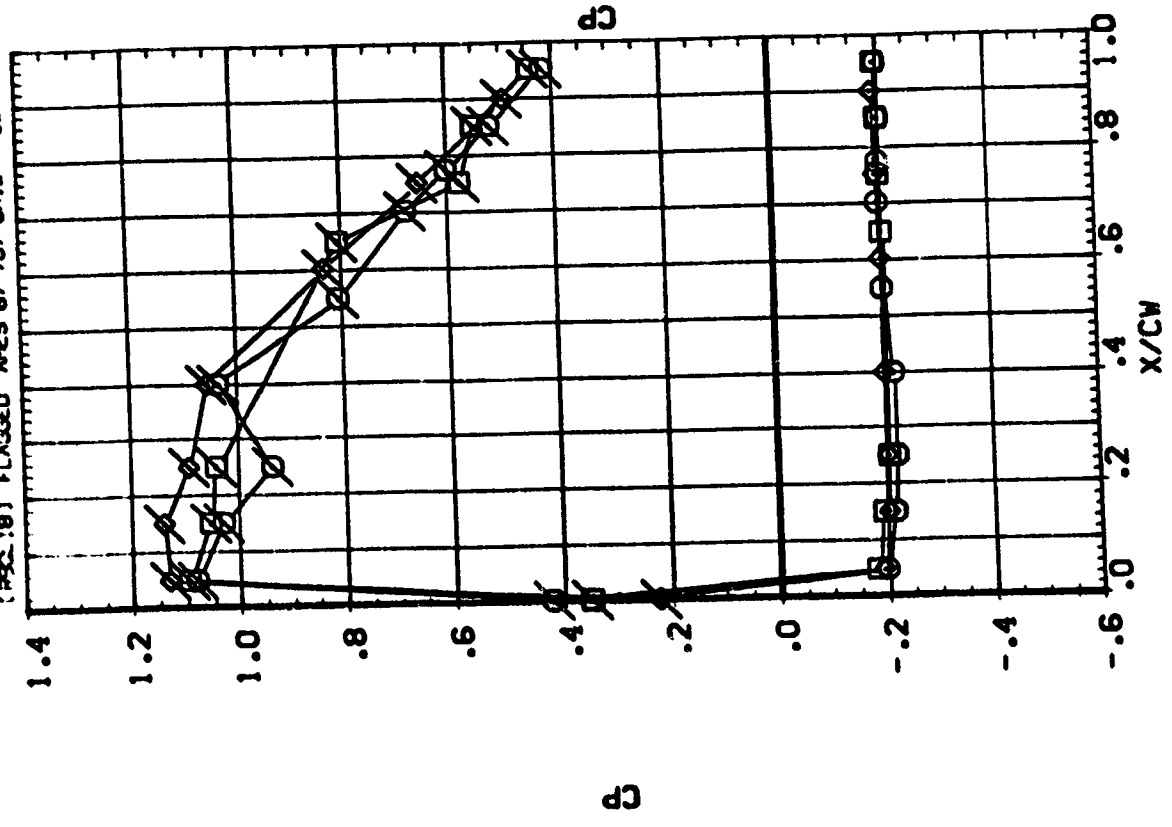
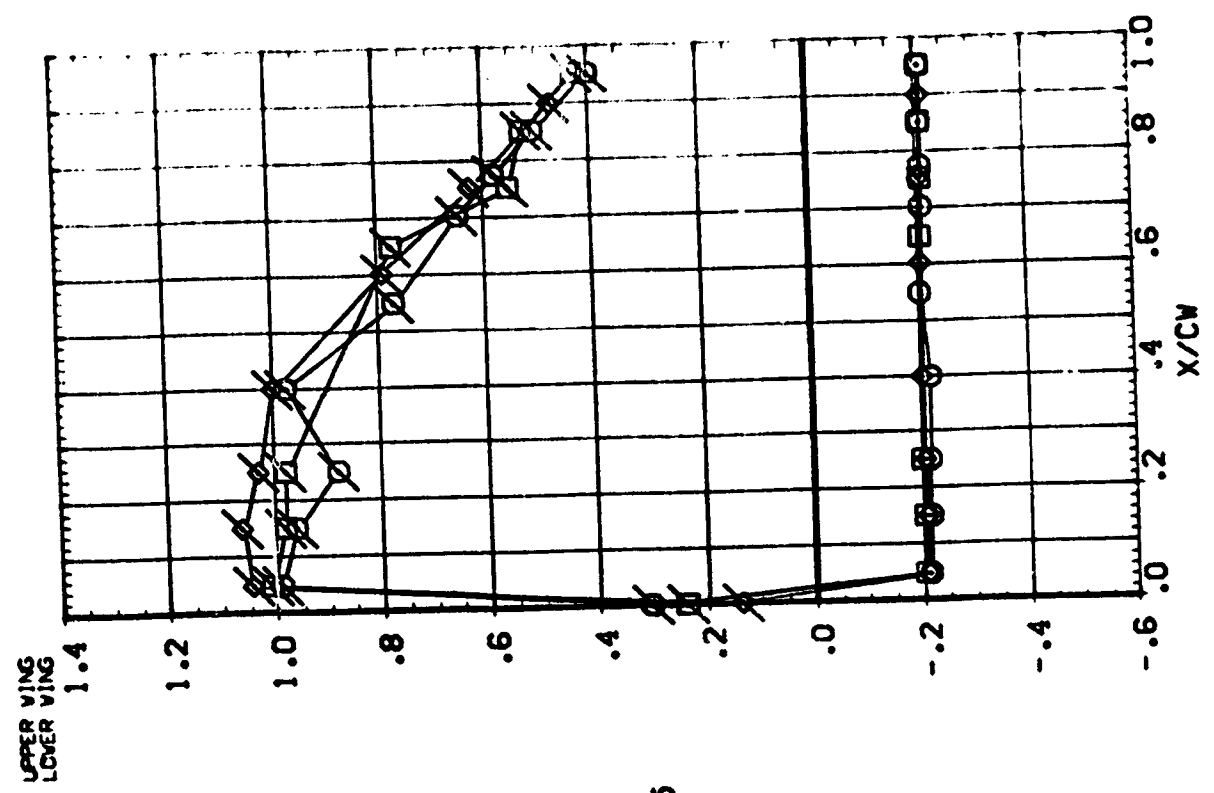
ALPHA
 ELEVON

BETA MACH
 -1.30 2.498

Y/BV
 .673
 .780
 .887

SYMBOL
 □
 ○
 ◇

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REQ: 8) OPEN ARES 87-707 DA12 OZA
 (REQ: 8) FLAGGED ARES 87-707 DA12 OZA



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

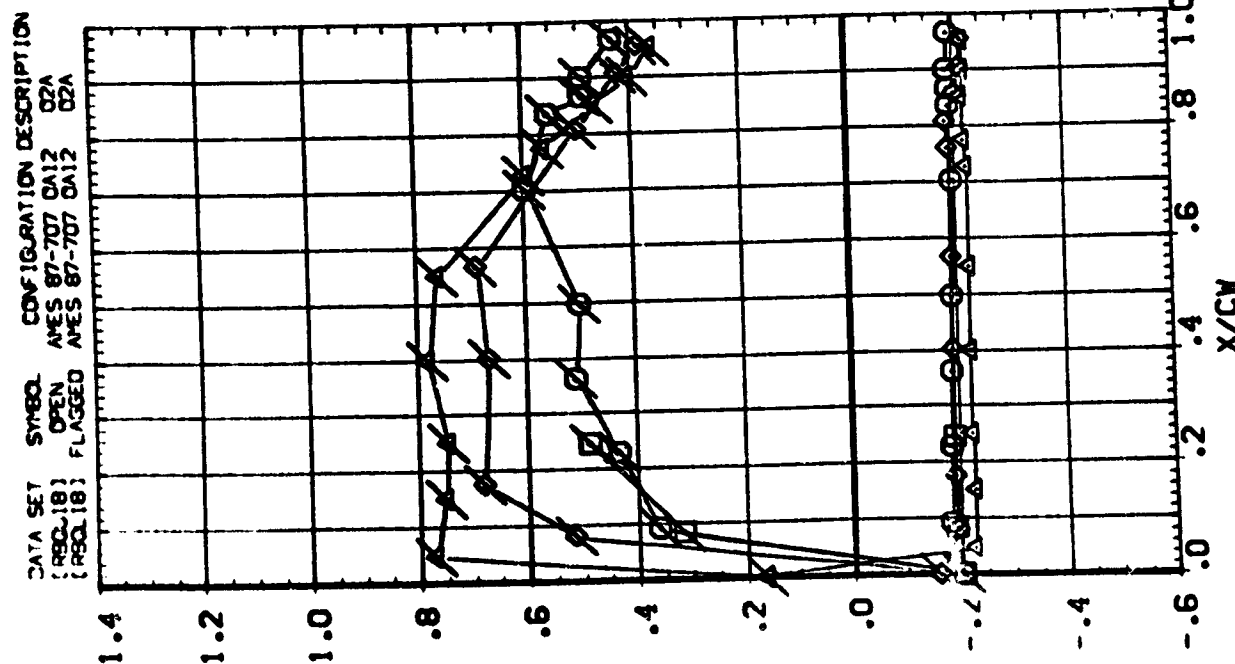
PARAMETRIC VALUES
 30.000 RUDER .000
 .000 RUFLR 45.000

ALPHA
 ELEVON

BETA 6.240 MACH 2.498

SYMBOL Y/B_u
 .299
 .364
 .427
 .534

UPPER WING
 LOWER WING



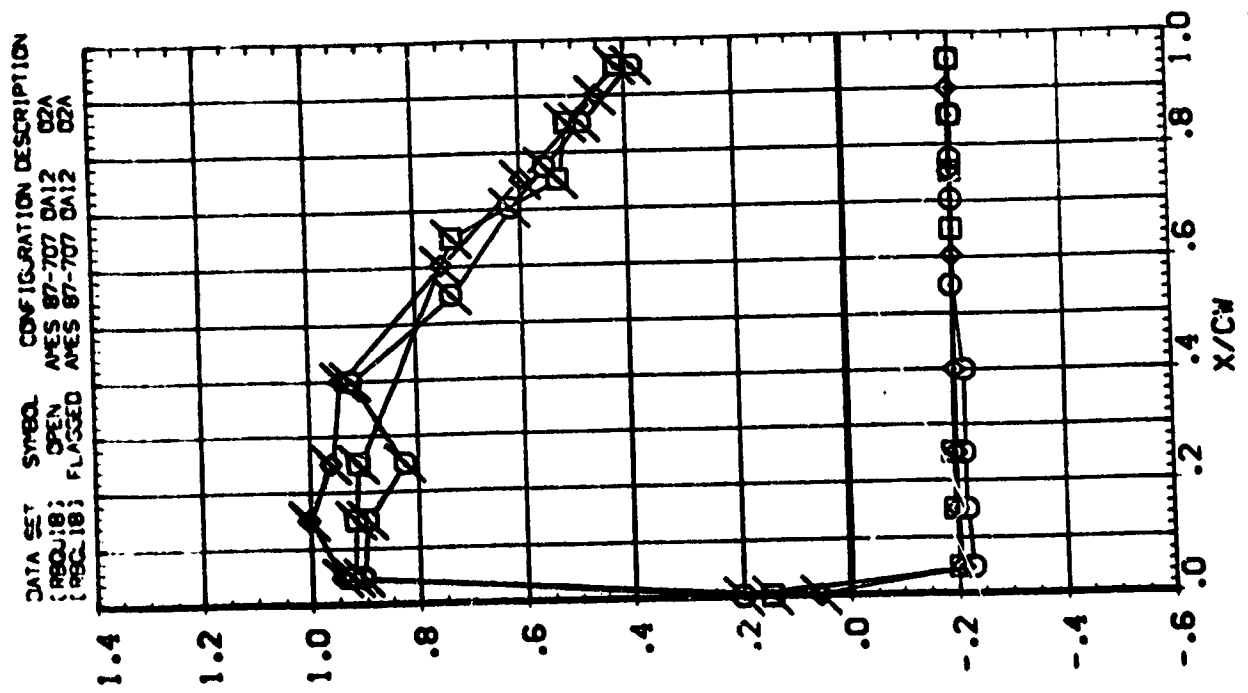
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 30.000 RUDER .000
 .000 RUDER 40.000

ALPHA
 ELEVON

SYMBOL Y/BV BETA MACH
 .673 6.240 2.498
 .78C
 .887

UPPER WING
 LOWER WING



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

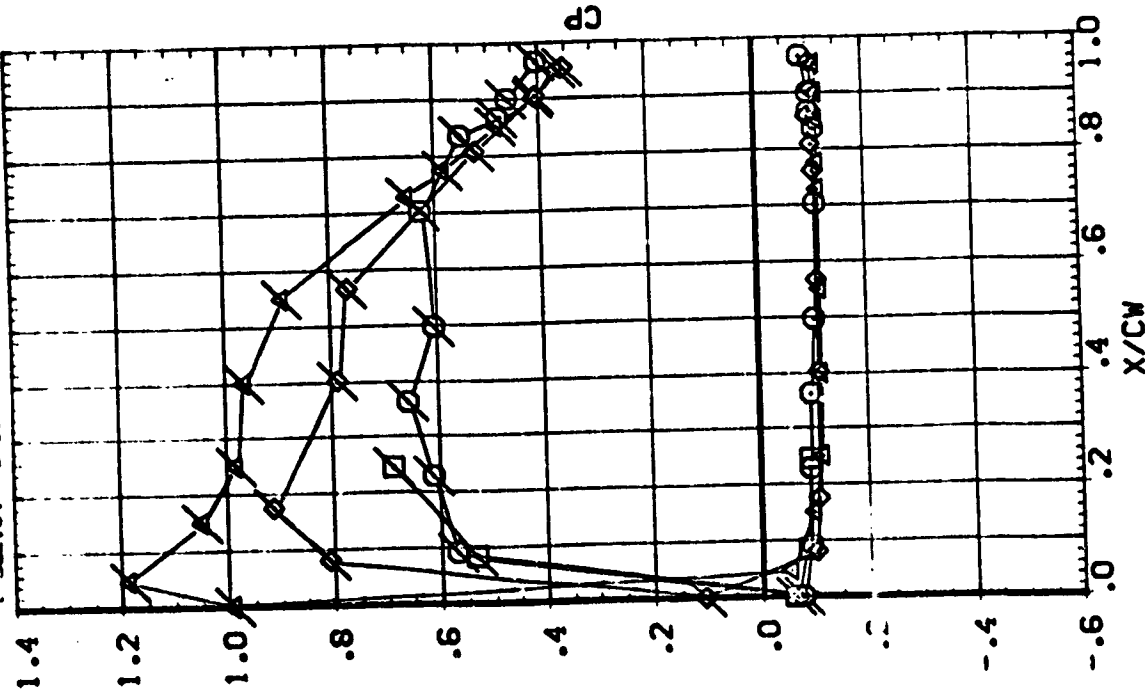


SYMBOL Y/34
 () .299
 [] .364
 O .427
 Δ .534

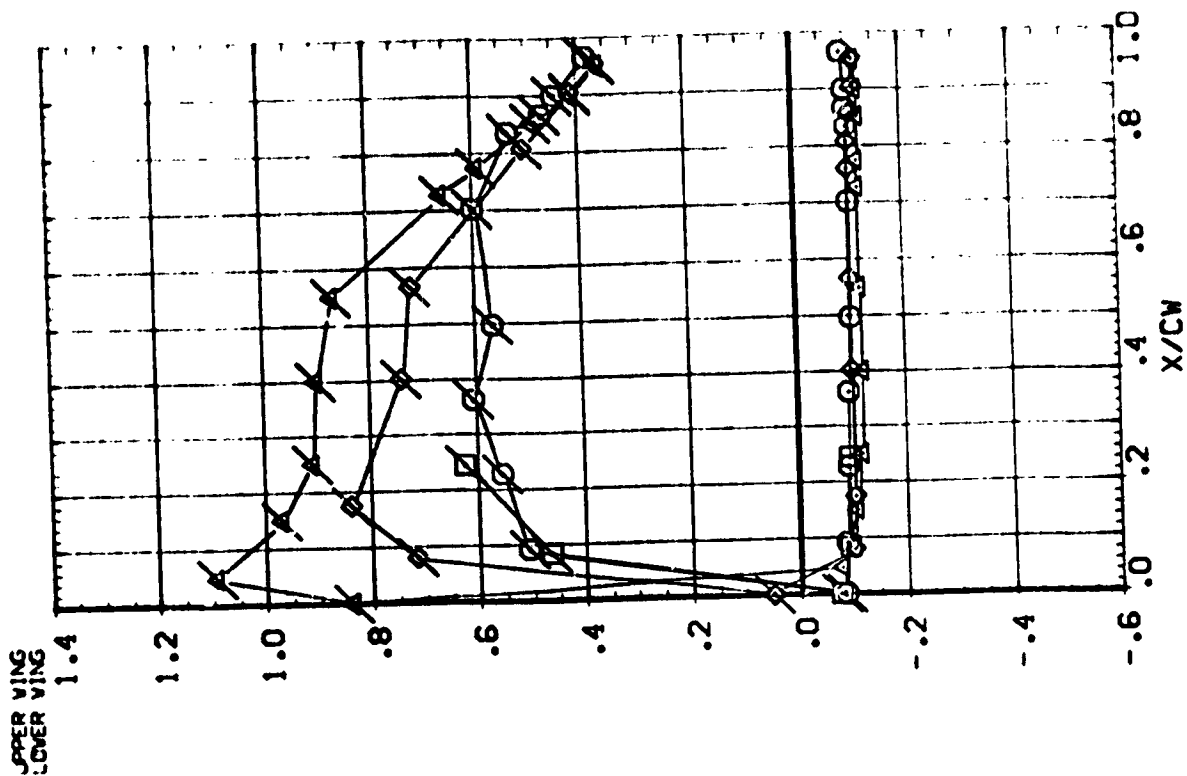
BETA
 -6.700
 -3.470

MACH
 3.50

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 REQ 18 OPEN AYES 87-707 DAI2 Q2A
 REQ 18 FLAGGED AYES 87-707 DAI2 Q2A



PARAMETRIC VALUES
 ALPHA 30.000
 ELEV 0.000
 RUDER 0.000
 RUFLR 40.000



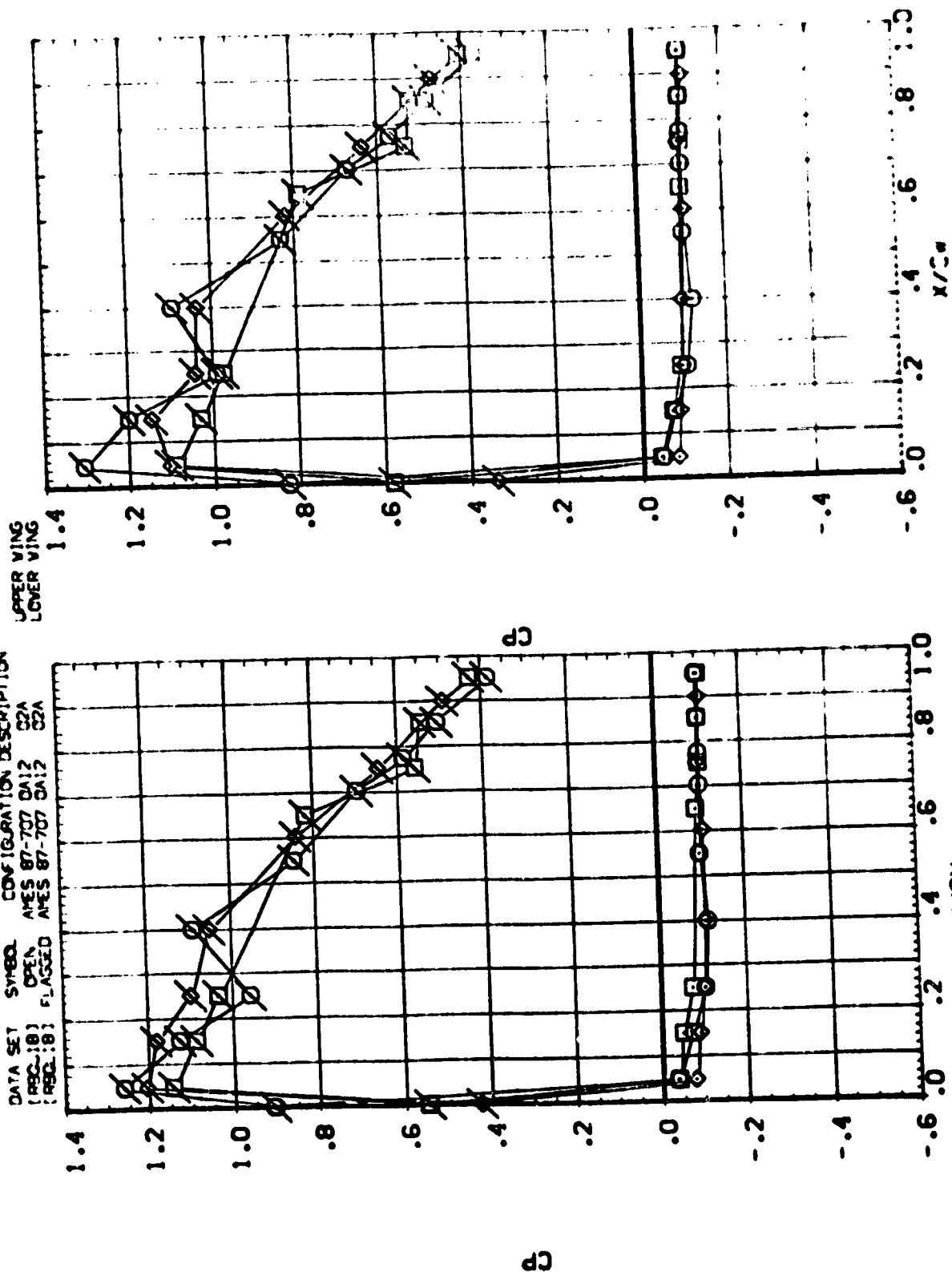
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA 2.000
 ELEVON 0.000
 40.000

SYMBOL 1/3N
 .673
 .78C
 .887

BETA 3.501
 -6.70C
 -3.42C

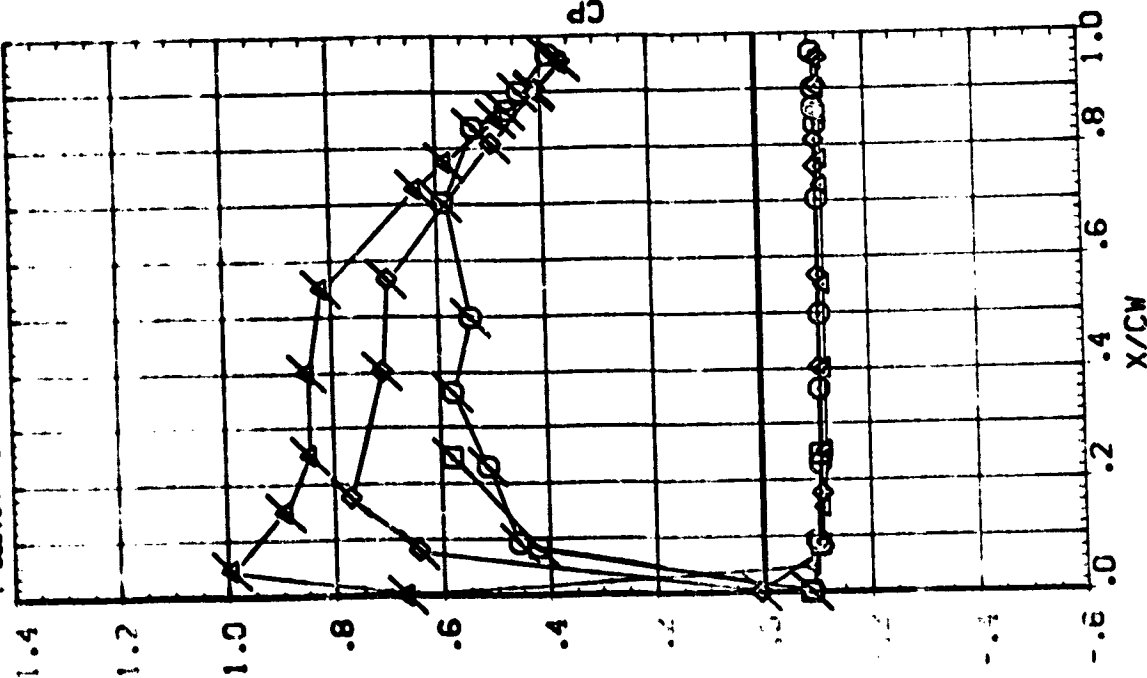
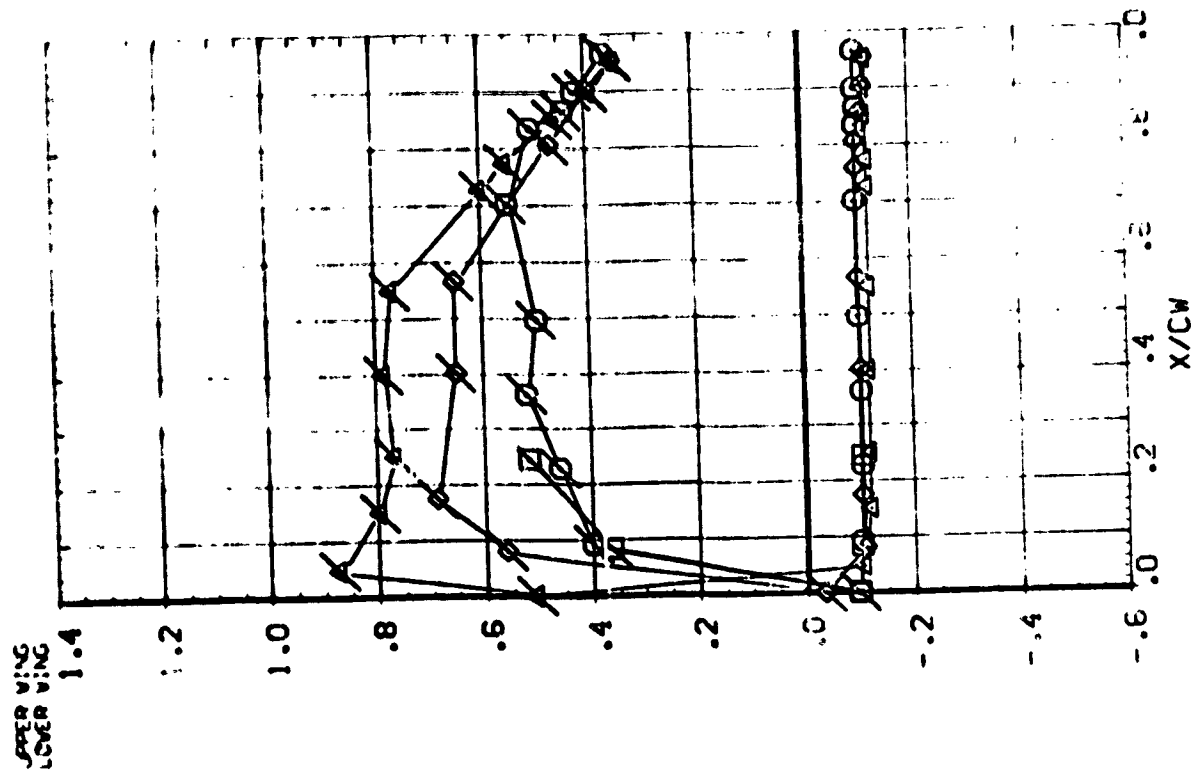
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REG:18) OPEN AMES 87-707 DA12 C2A
 (REG:18) FLAGGED AMES 87-707 DA12 C2A



SYMBOL: A, J, S
 CASE: 2000
 CASE: 2000
 CASE: 2000

SYMBOL: A, J, S
 CASE: 2000
 CASE: 2000
 CASE: 2000

DATA SET: SYMBOL, COORDINATE, DESCRIPTION
 (PLOT 18) OPEN, ASES 87-727, 2A12, 2PA
 (PLOT 18) FLASCO, ASES 87-727, 2A12, 2PA

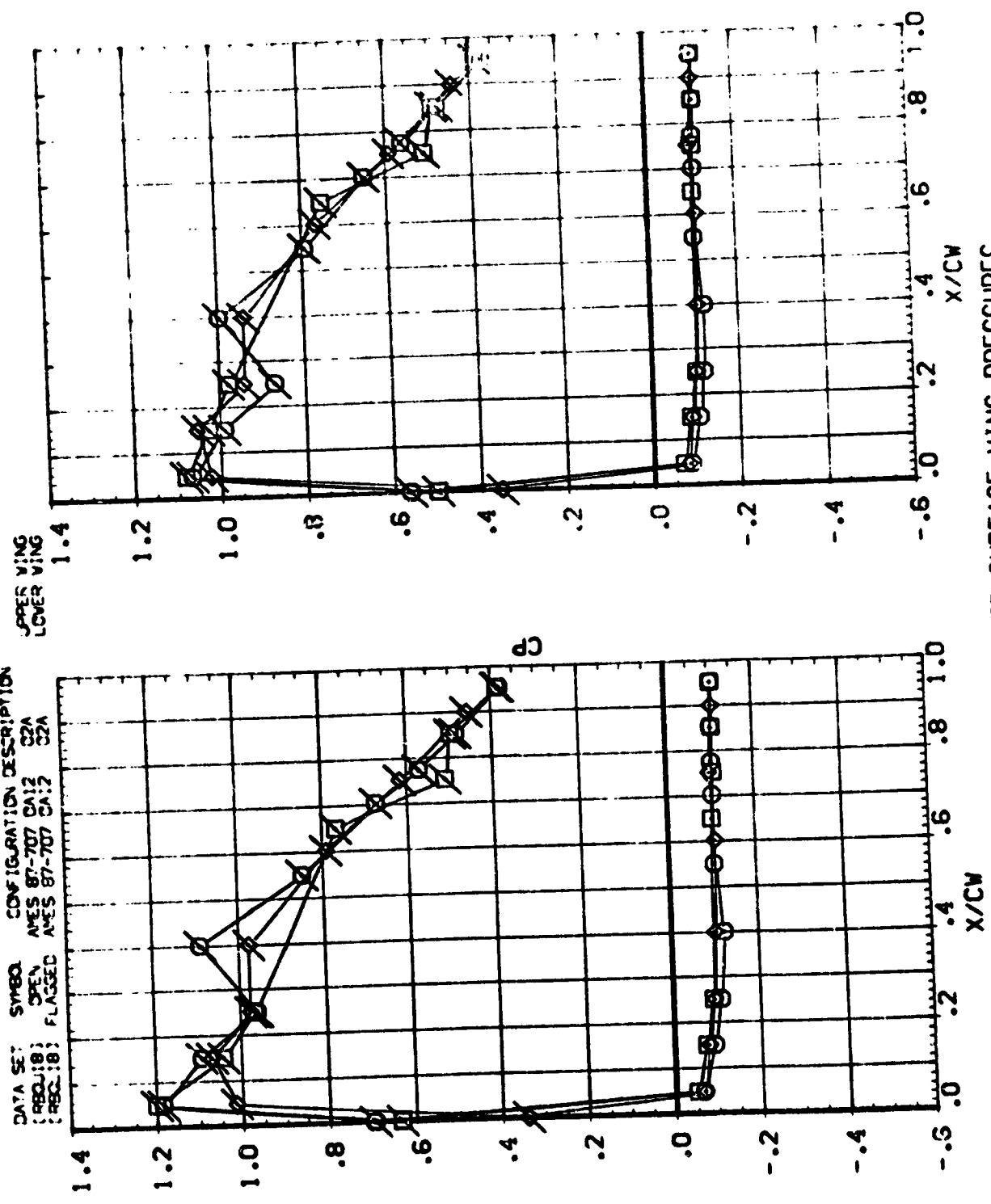


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA 30.000 2.0000
 ELEVATION 100.000 10.000

SYMBOL Y/B₁ BETA MACH
 ○ .573 3.501
 □ .780 3.170
 △ .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REQD) 18 OPEN AMES 87-707 CA12 C2A
 (REQD) 18 FLAGGED AMES 87-707 CA12 C2A

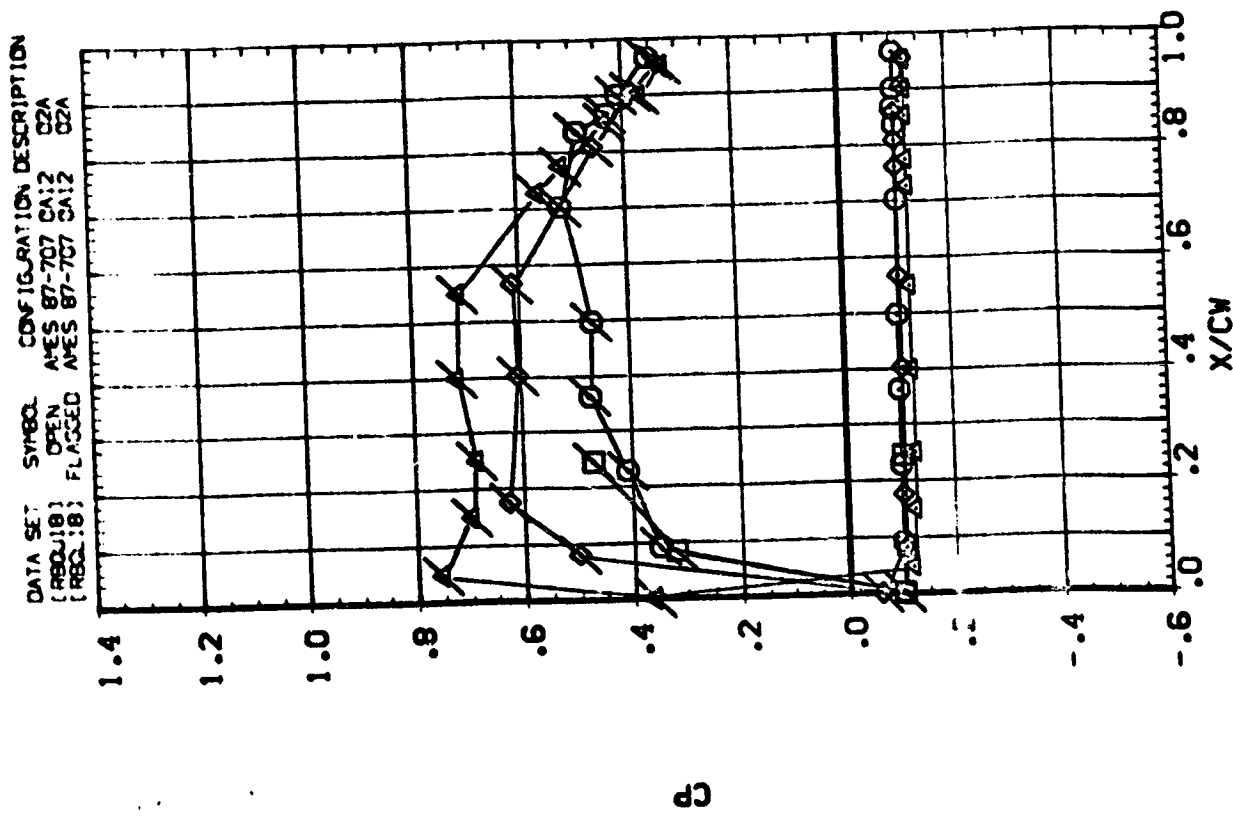


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA 30.000 RUDER .000
 ELEVON .000 RUDER 40.000

SYMBOL Y/BV BETA WAC
 .799 6.470 3.501
 .364
 .427
 .534

UPPER WING
 LOWER WING

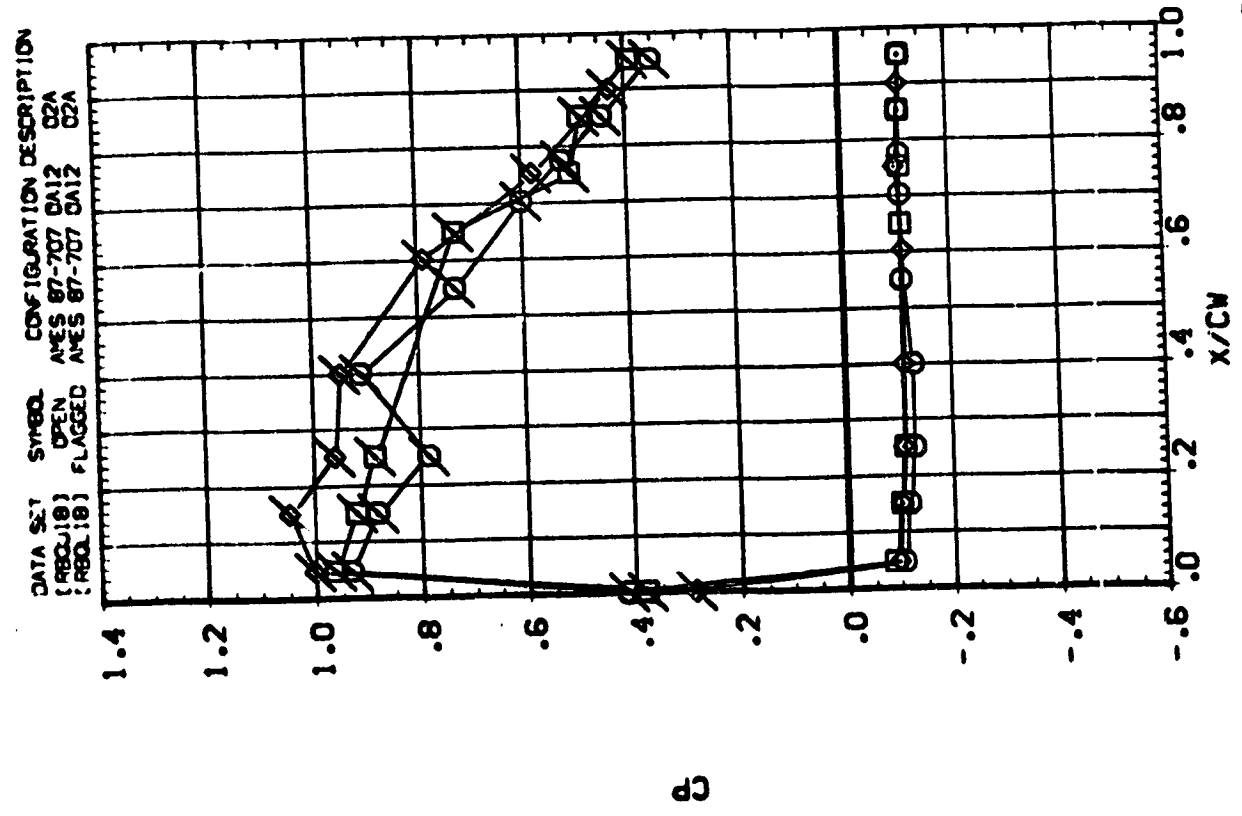


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA 10.000
 ELEVON 10.000
 RUDER 10.000
 RUDER 10.000

SYNTH. VIBN .673
 .78C
 .887
 BETA 6.470
 PAC- 3.501

UPPER WING
 LOWER WING



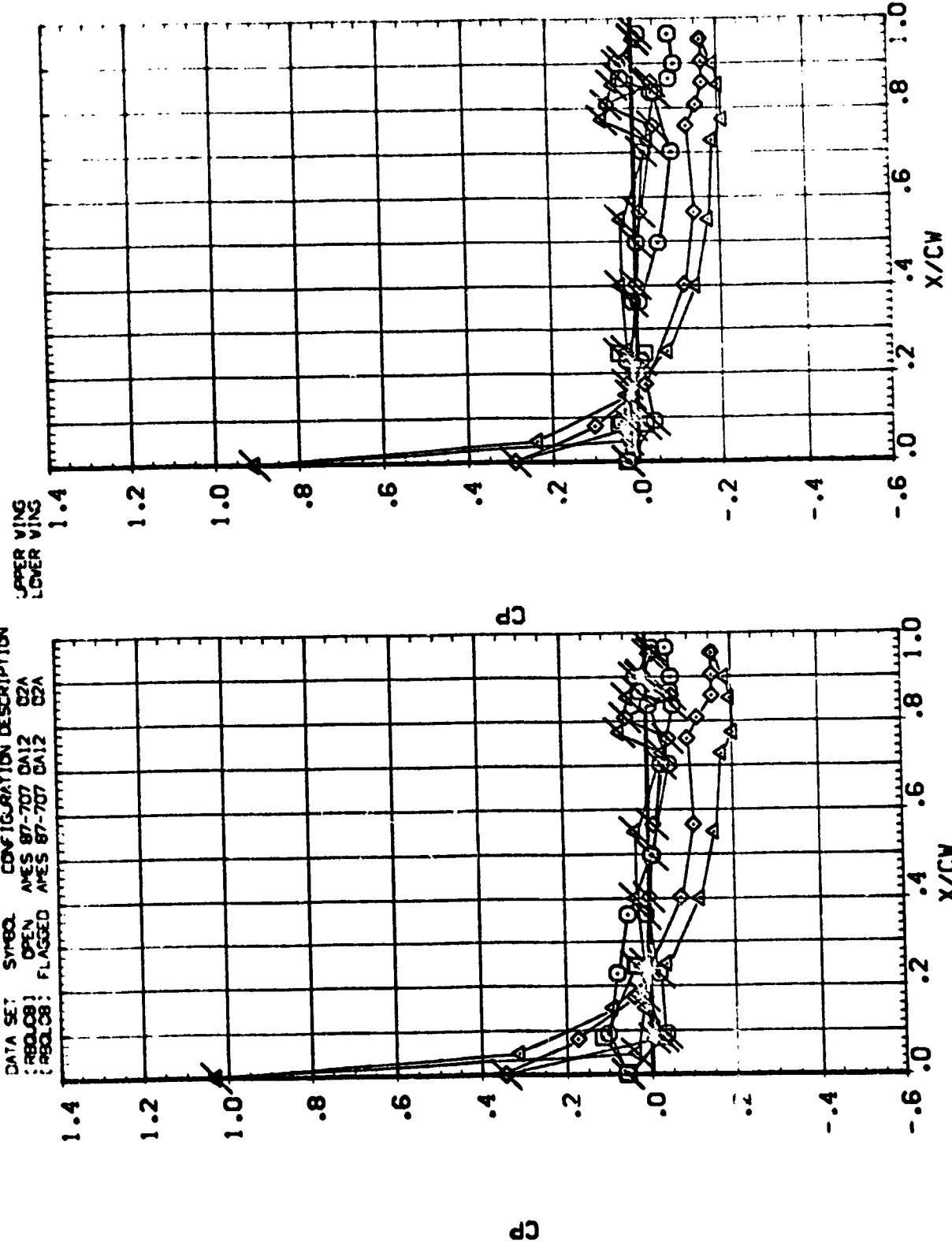
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 .000 RUDDER .000
 .000 RUDLER .000
 10.000 RUDLER 40.000

ALPHA
 ELEVON

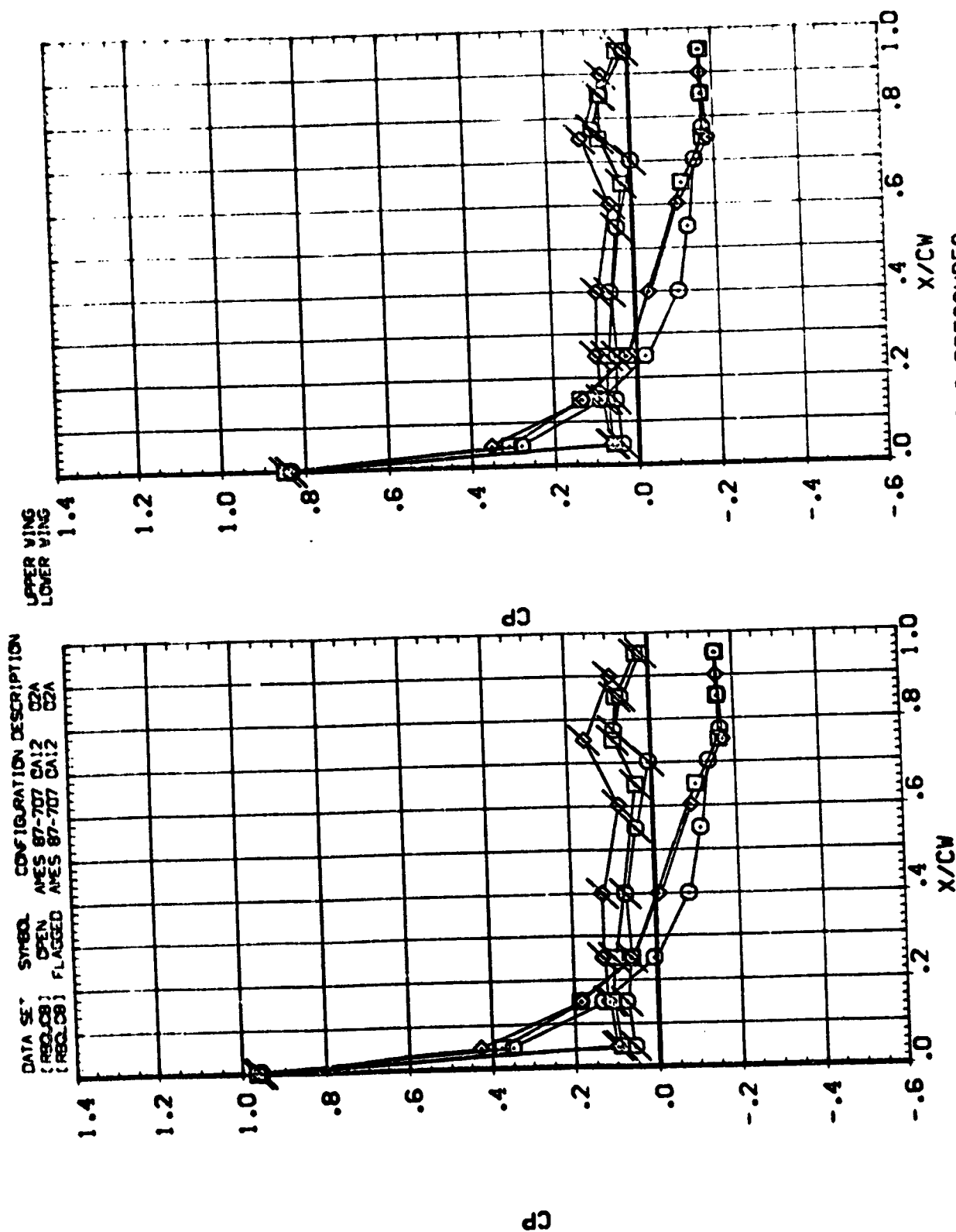
SYMBOL Y/BV BETA MACH
 .299 -6.440 2.498
 .364 -3.300
 .477
 .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 : RELOC8 : OPEN AMES 87-707 DAI2 02A
 : RELOC8 : FLAGGED AMES 87-707 DAI2 02A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

SYMBOL	Y/BV	BE TA	MACH
()	.573	-6.44C	2.498
()	.78C	-3.30C	
◇	.687		

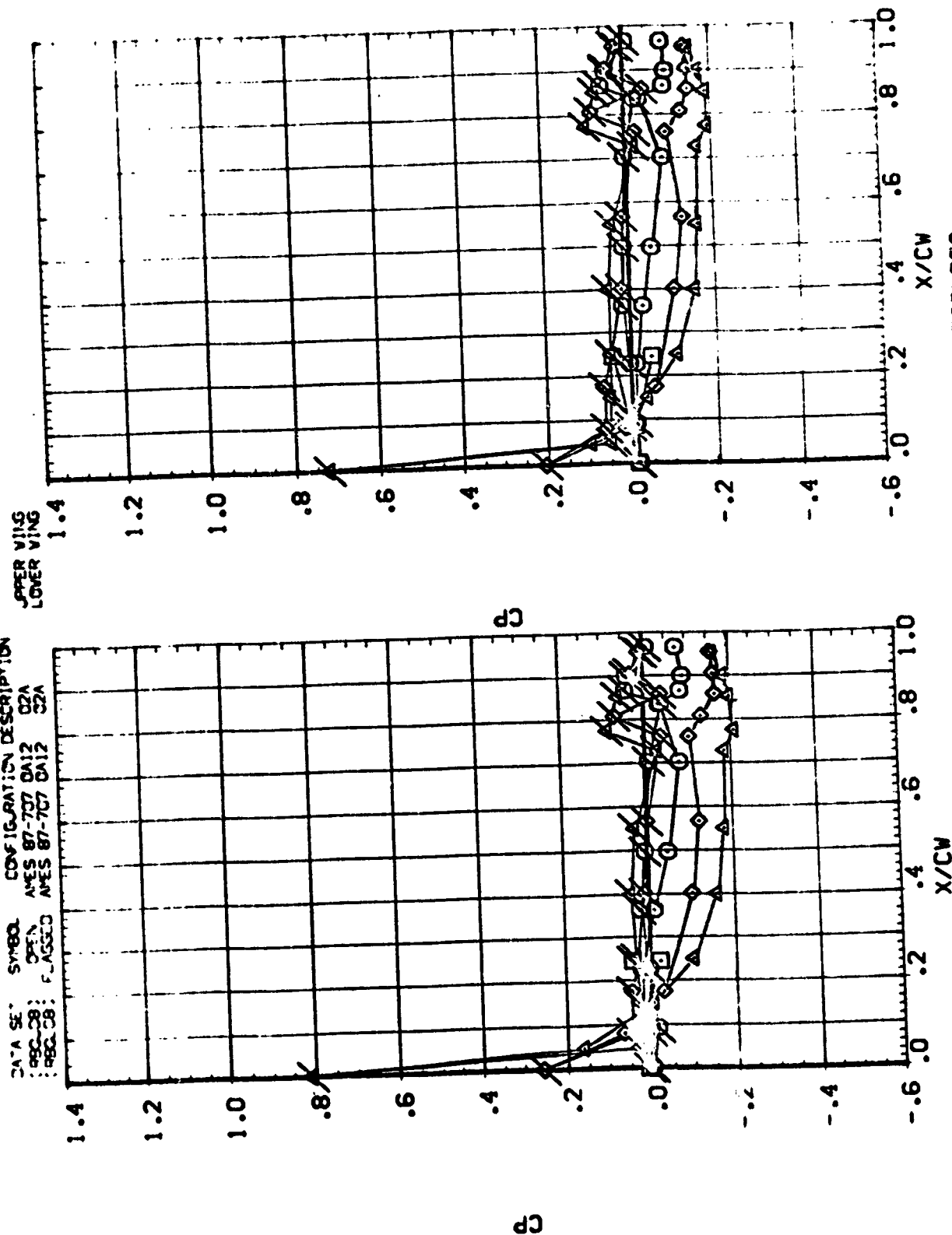


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETER VALUES
 ALPHA 2.000
 ELEVON 10.000
 RUDDER 2.000
 40.000

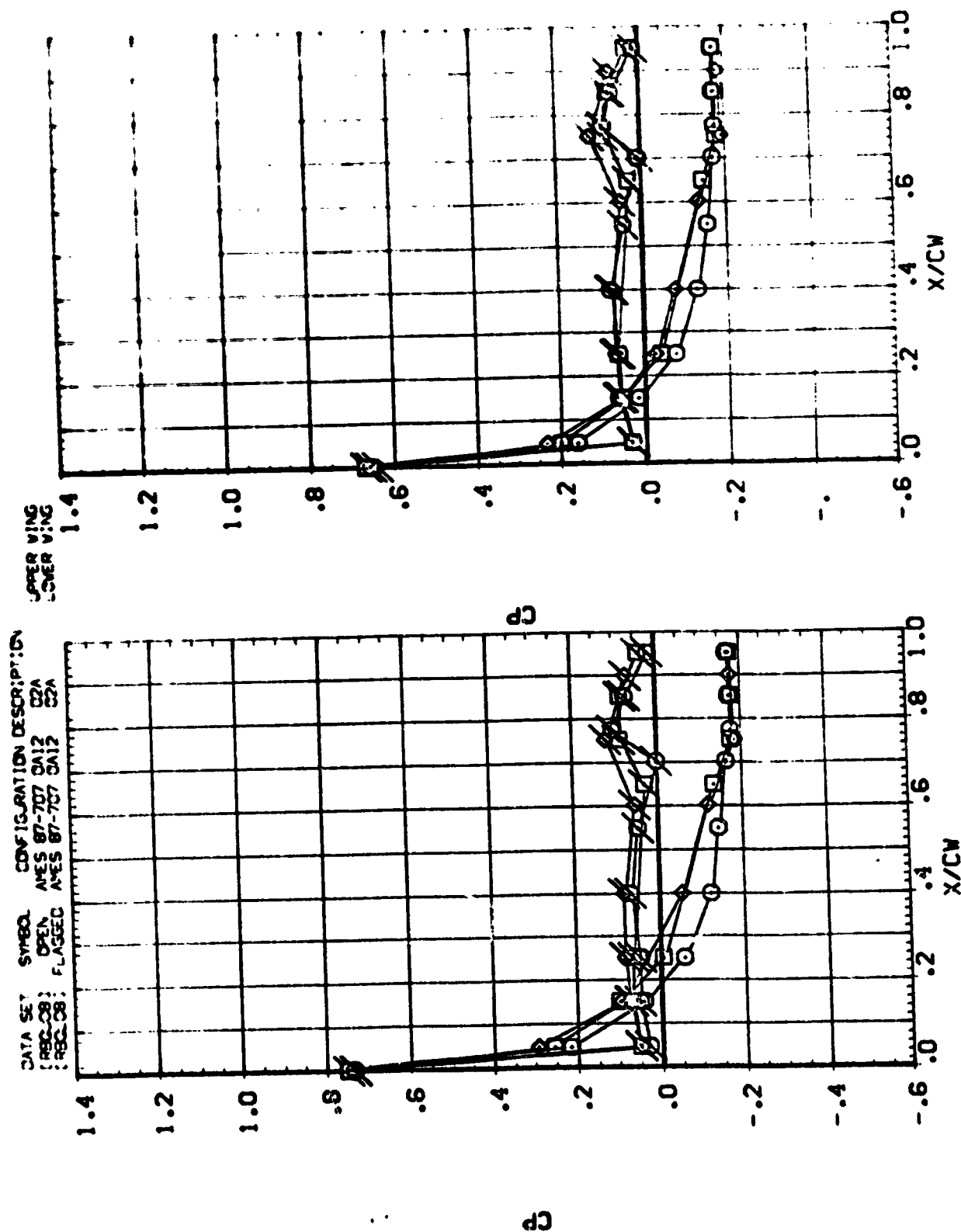
SYMBOL V/B₀ BETA WAC
 .299 .160 2.498
 .364 3.060
 .477
 .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 88C-08 OPEN ARES 87-707 0A12 02A
 88C-08 FLAGGED ARES 87-707 0A12 02A



312046 2:10 09.35
 1.00 0.0000
 0.00 0.0000

SYMBOL γ/β BETA MACH
 .673 .160 2.498
 .780 3.060
 .887



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

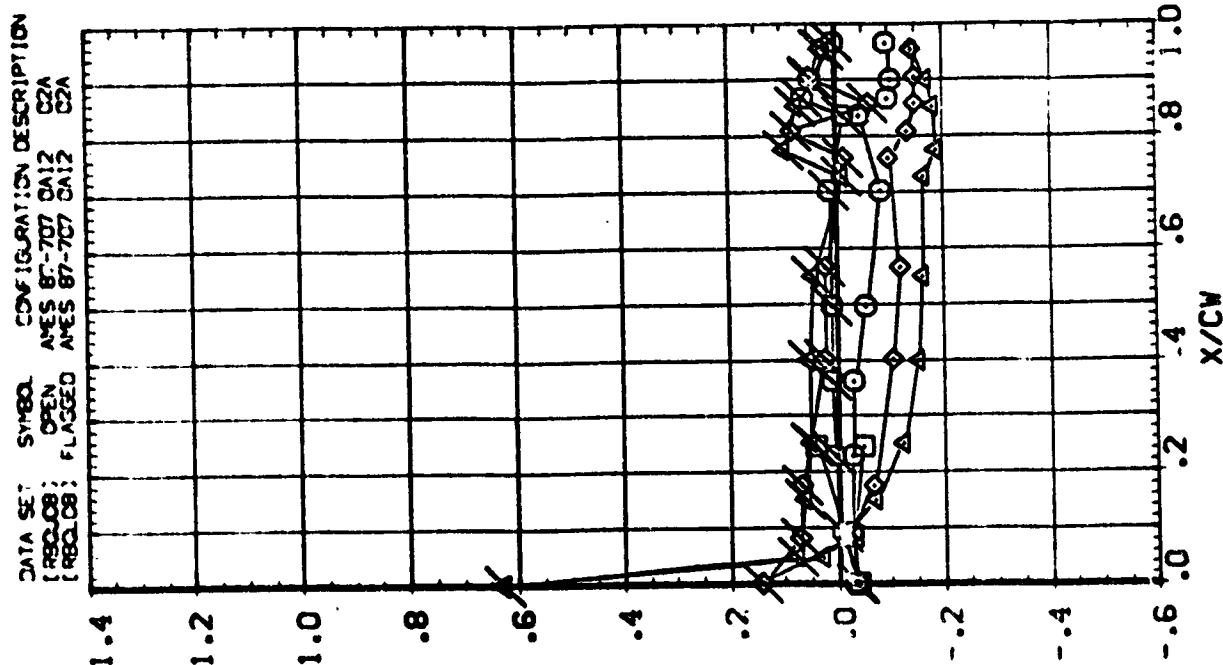
PARAMETRIC VALUES
 ALPHA ELEVON
 .000 RUDLER
 10.000 RUDLER

SYMBOL
 .799
 .364
 .477
 .534

BETA
 6.290
 2.498

WAC
 2.498

UPPER WING
 LOWER WING

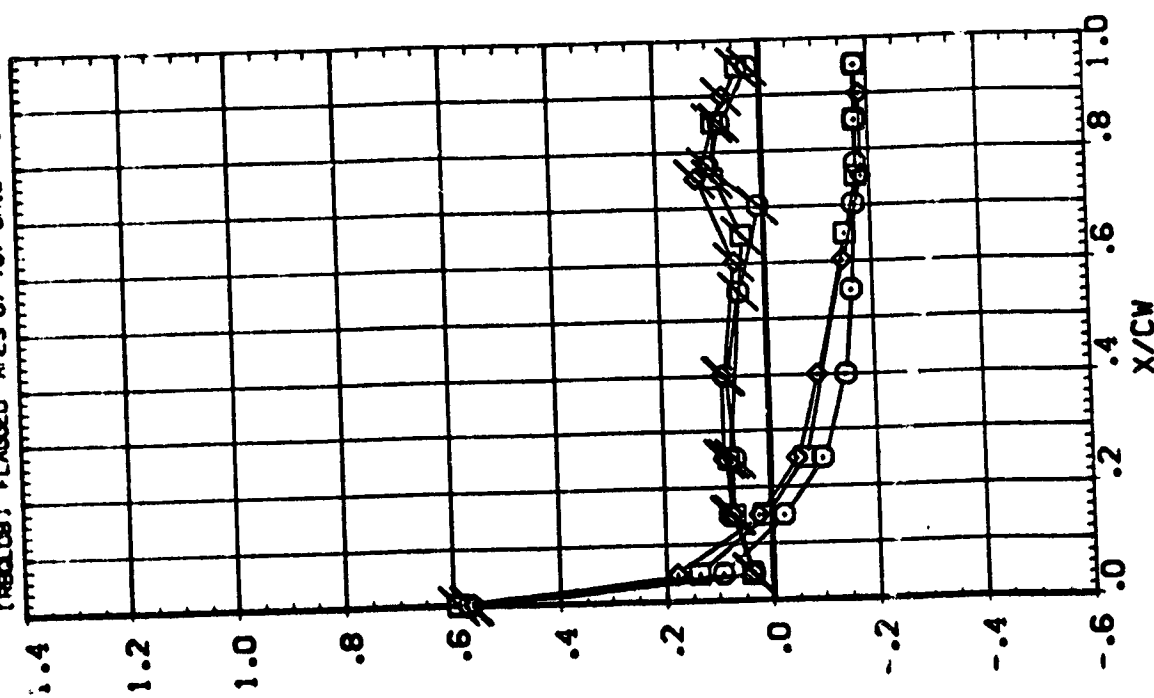


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

6.273 6.290 2.498
 .780
 .887

UPPER WING
 LOWER WING

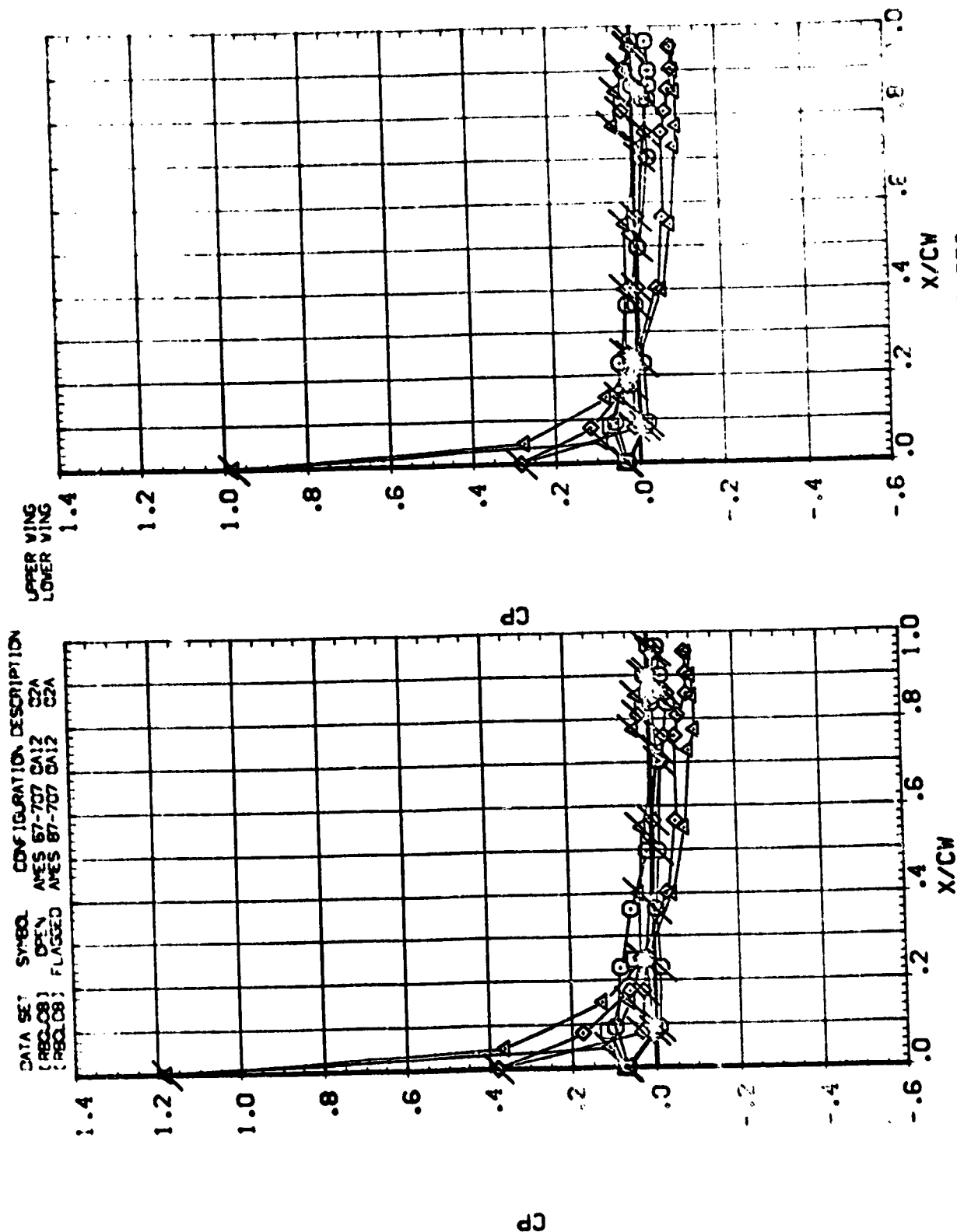
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R8QJ08) OPEN APES 87-707 CA12 02A
 (R8QJ08) FLAGGED APES 87-707 CA12 02A



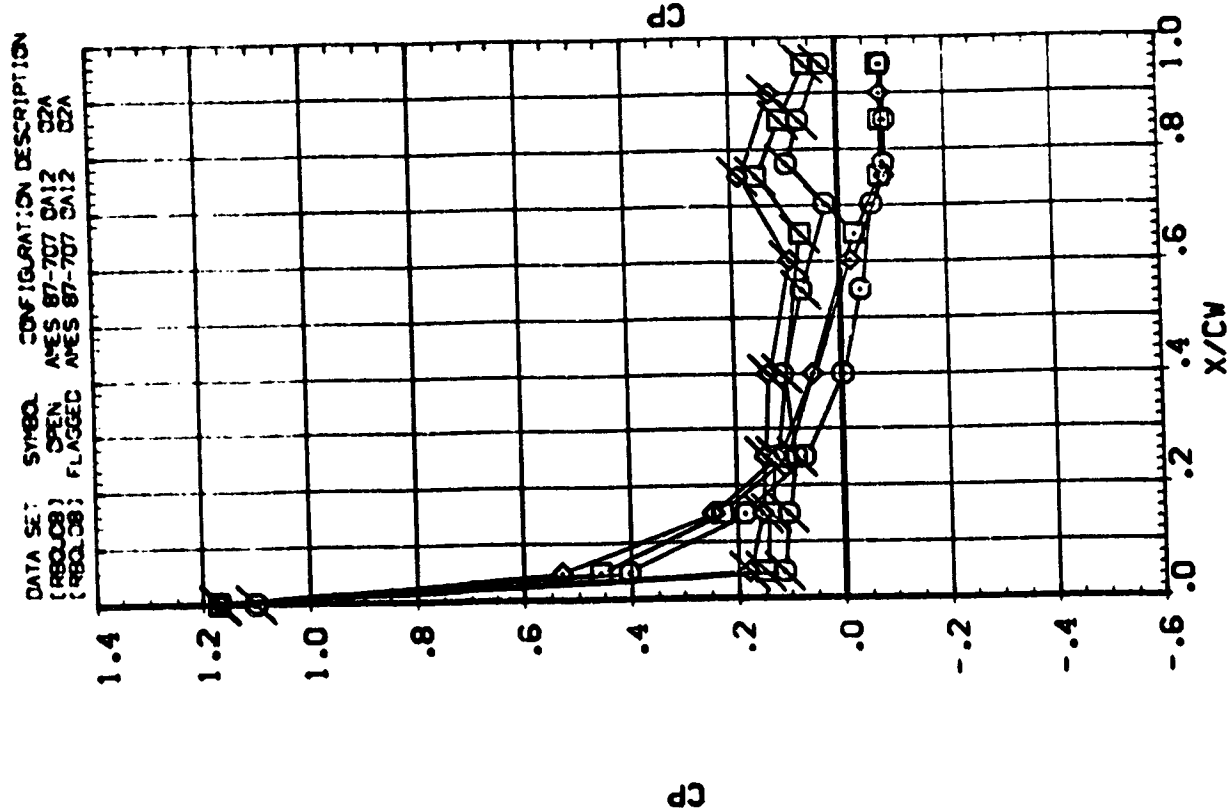
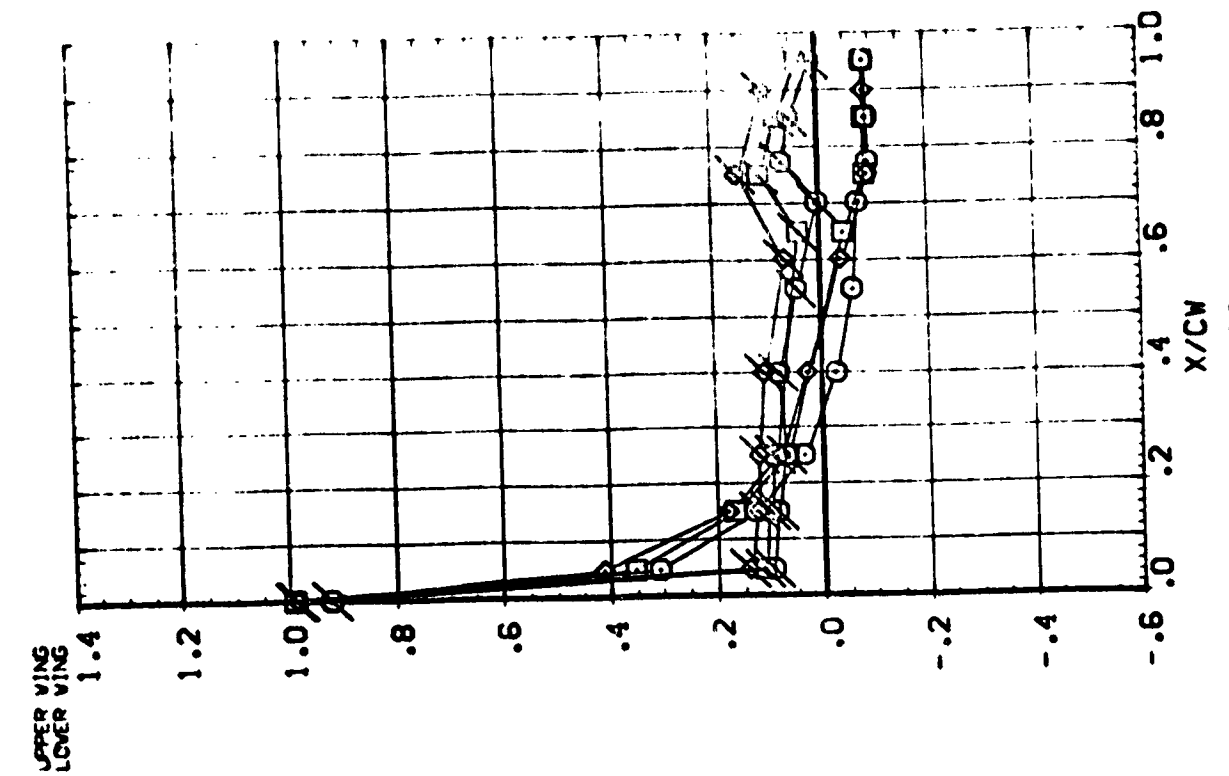
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA .000
 ELEVON .000
 RUDER .000
 RUFLR 40.000

SYMBOL V/B₁ BETA MACH
 .299 -6.67C 3.501
 .364 -3.42C
 .427
 .534



PARAMETRIC VALUES
 ALPHA .000 RADIUS .000
 ELEVATION 10.000 RADIUS 40.000



DATA SET: SYMBOL CONFIGURATION DESCRIPTION
 (RBL008) OPEN ASES 87-707 DA12 02A
 (RBL008) FLAGGED ASES 87-707 DA12 02A

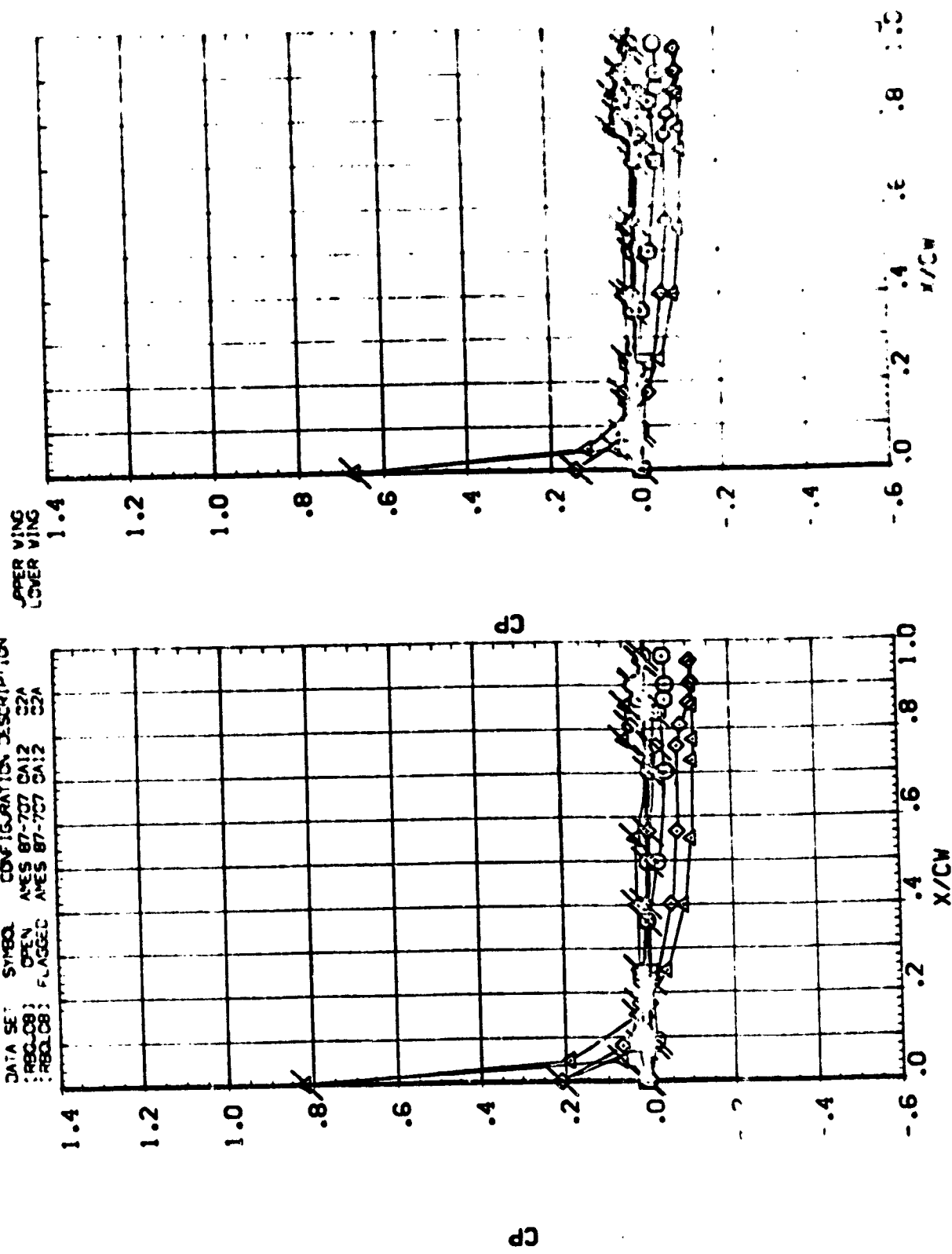
SYMBOL V/B₀ BETA MACH
 .573 -6.67C 3.50:
 .78C 3.42C
 .887

CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA .000 2.000 40.000
 ELEVON .000 2.000 40.000

SYMBOL γ/β BE γ γ/β γ/β
 () .299 .170 3.50
 () .364 .310 3.10
 () .427
 () .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 :RBC08 OPEN ARES 87-707 CA12 C2A
 :RBC08 FLASSED ARES 87-707 CA12 C2A

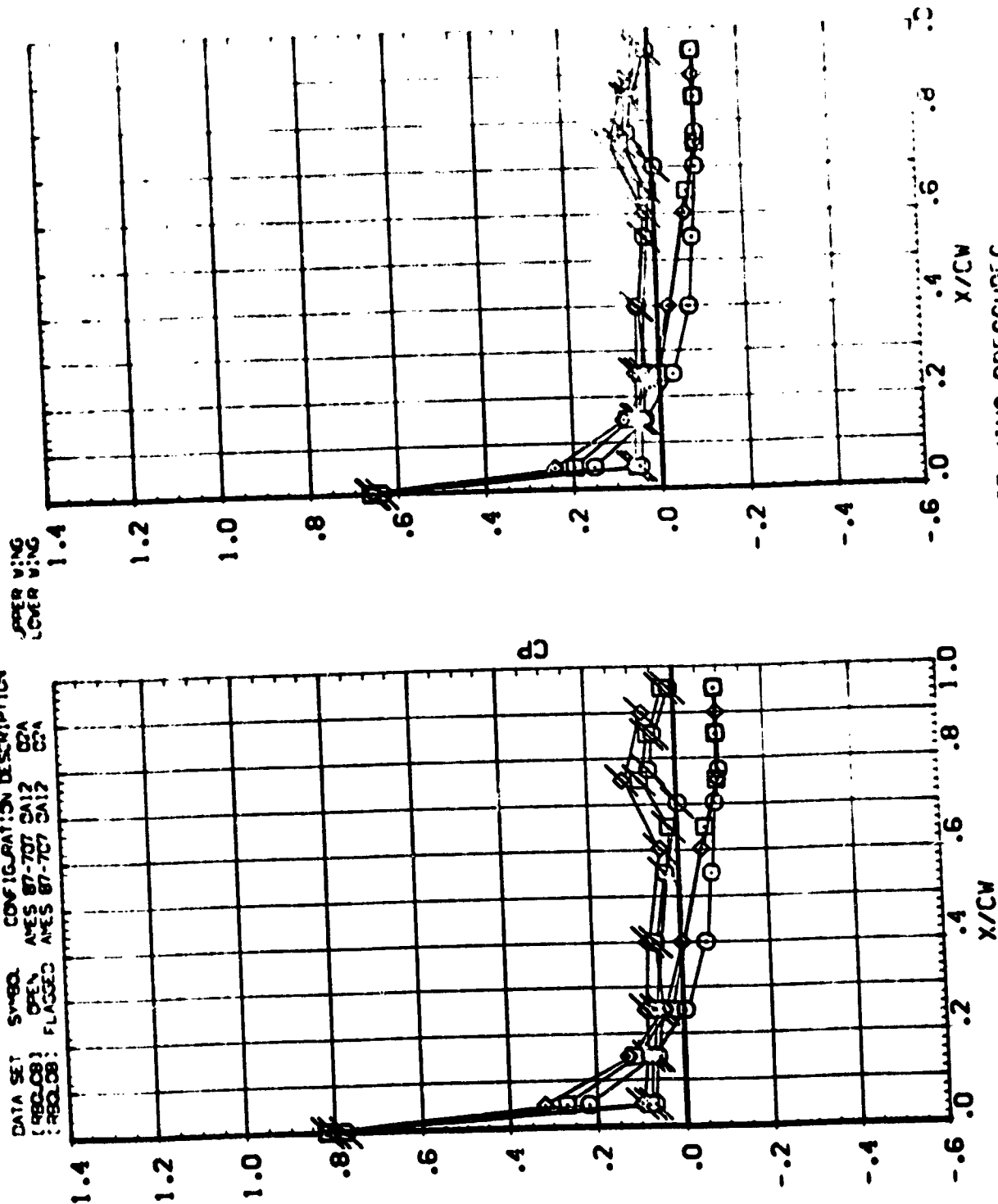


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

See page 216. above

BETA
-:73
3:50

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(480-08)	OPEN	APES 87-707 3A12
(480-08)	FLIGHT	APES 87-707 3A12



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

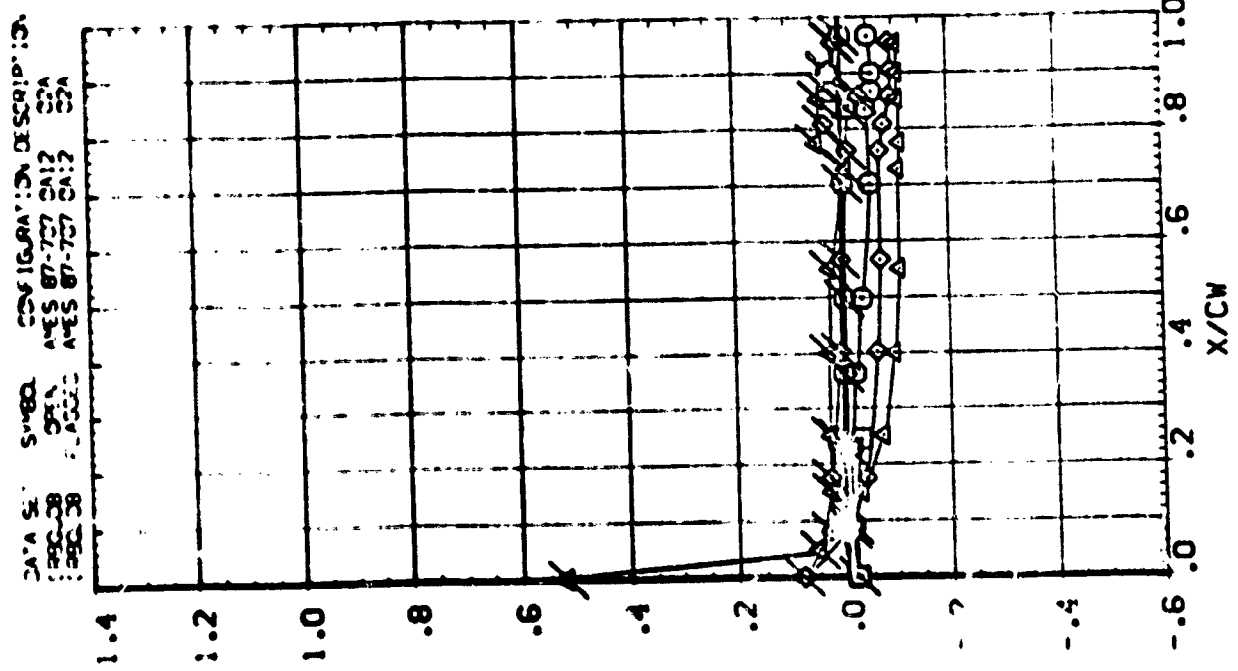
III

SYMBOL
 1/30
 .000
 .364
 .427
 .534

TIME
 6.50 3.50

ALPHA
 10.000
 20.000
 30.000

UPPER WING
 LOWER WING



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

ALPHA
ELEVON

0.000
10.000

0.000
10.000

0.000
10.000

0.000
10.000

0.000
10.000

0.000
10.000

0.000
10.000

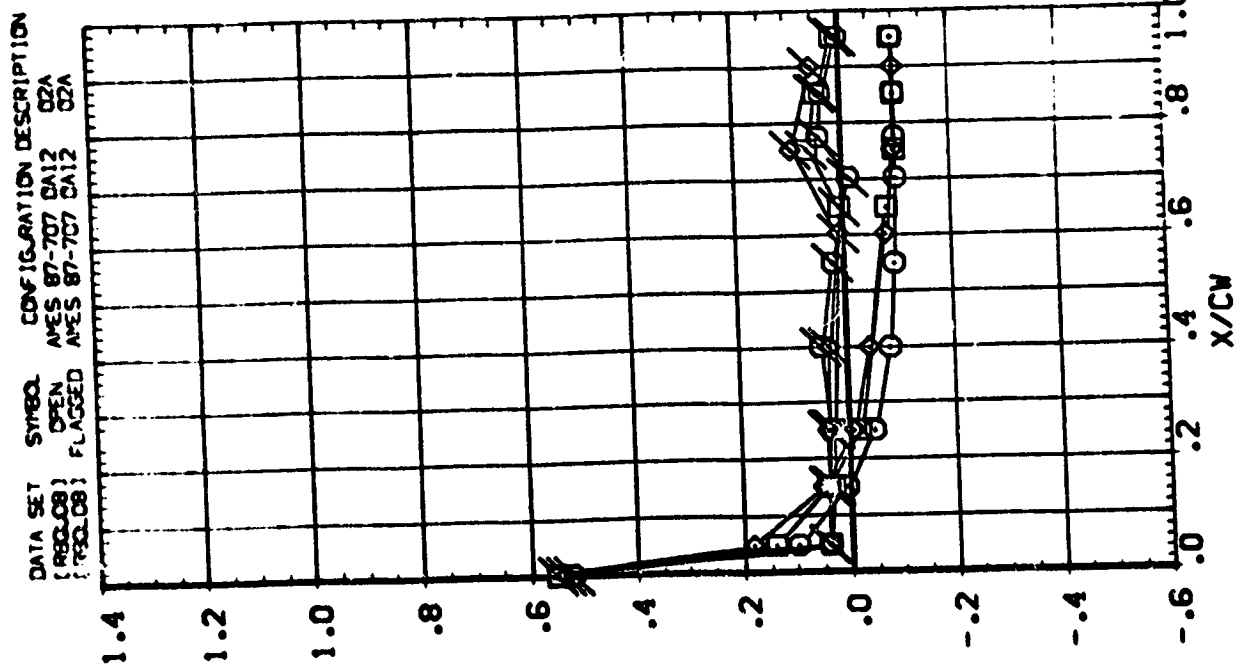
0.000
10.000

0.000
10.000

0.000
10.000

0.000
10.000

UPPER WING
LOWER WING

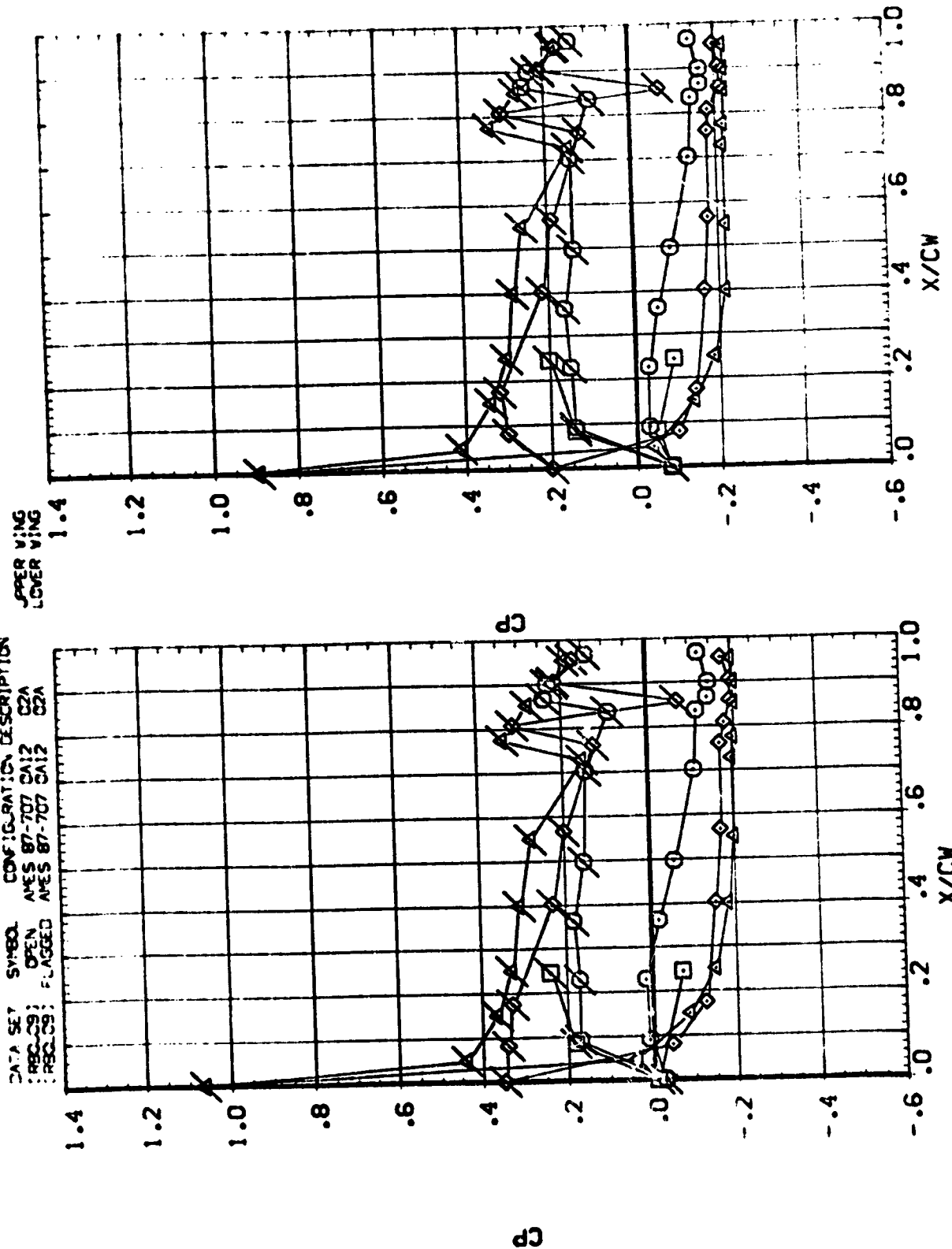


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

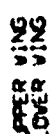
SYMBOL V/B₁ BETA MACH
 O .299 -6.52C 2.498
 □ .364 -3.340
 ◇ .427
 △ .534

PARAMETER VALUES
 ALPHA 10.00C 2.00C 2
 ELEVON 10.00C 2.00C 2

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 REC-29 OPEN AMES 87-707 CA12 C2A
 REC-29 FLAGGED AMES 87-707 CA12 C2A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

[illegible]

PAGE 58C



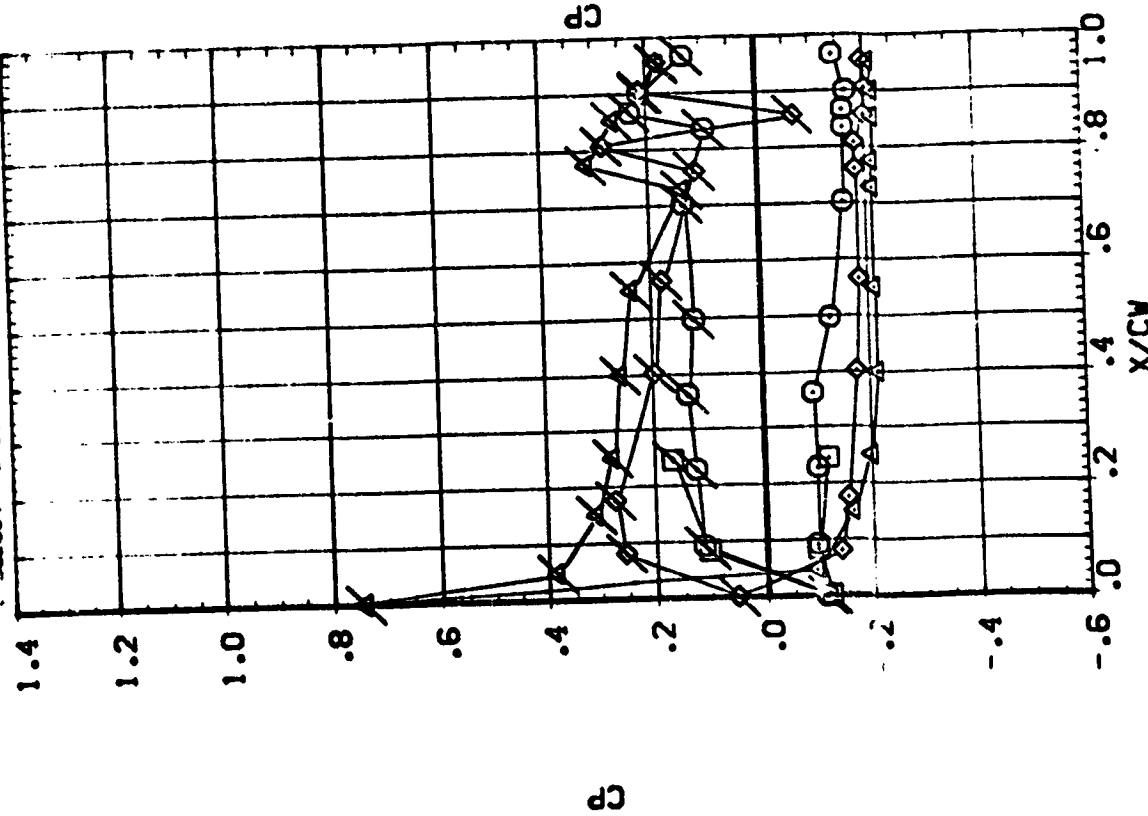
SYMBOL
O
X
V

Y/BA
.299
.364
.427
.534

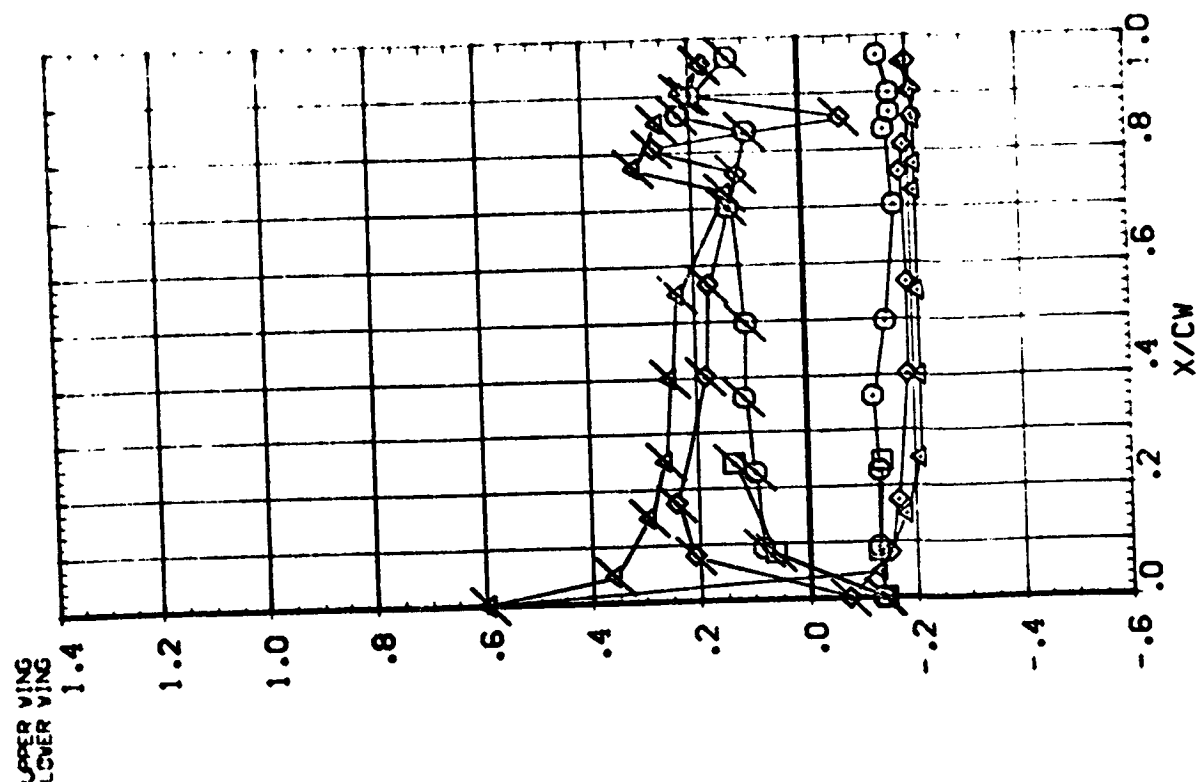
BETA
.160
3.070

WAC
2.498

DATA SET SYMBOL CONFIGURATION DESCRIPTION
PBC-09 OPEN AMES 87-707 CA12 C2A
PBC-09 FLANGED AMES 87-707 CA12 C2A

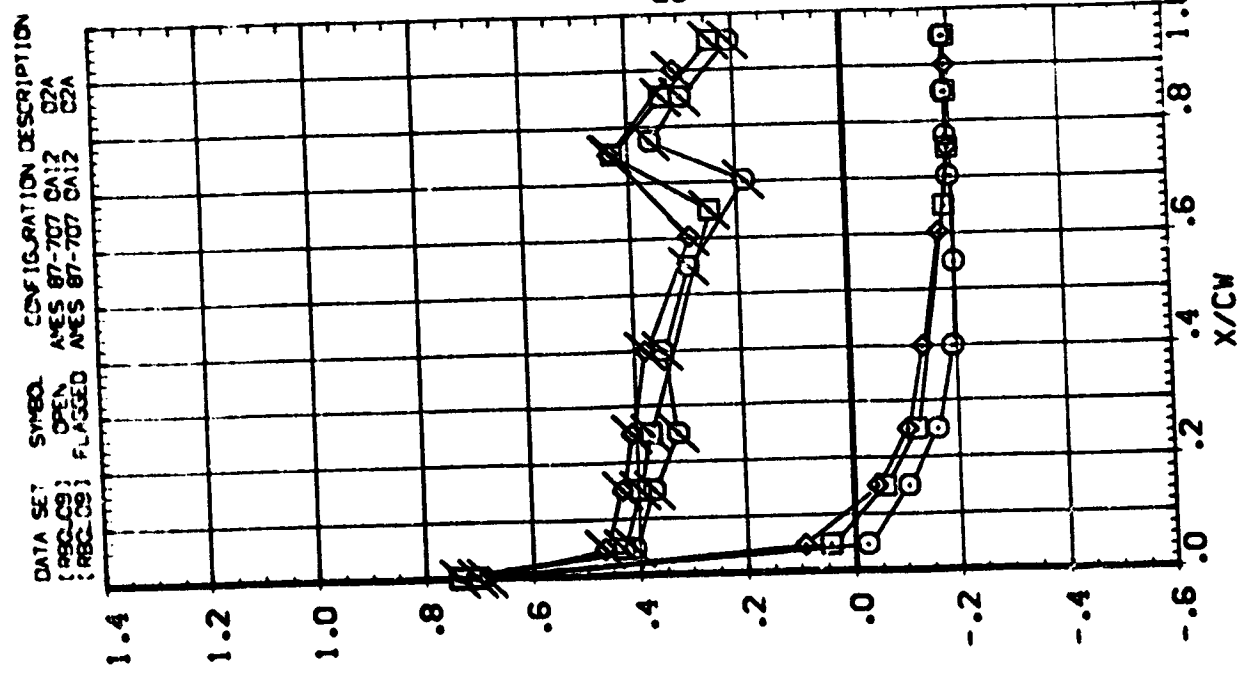
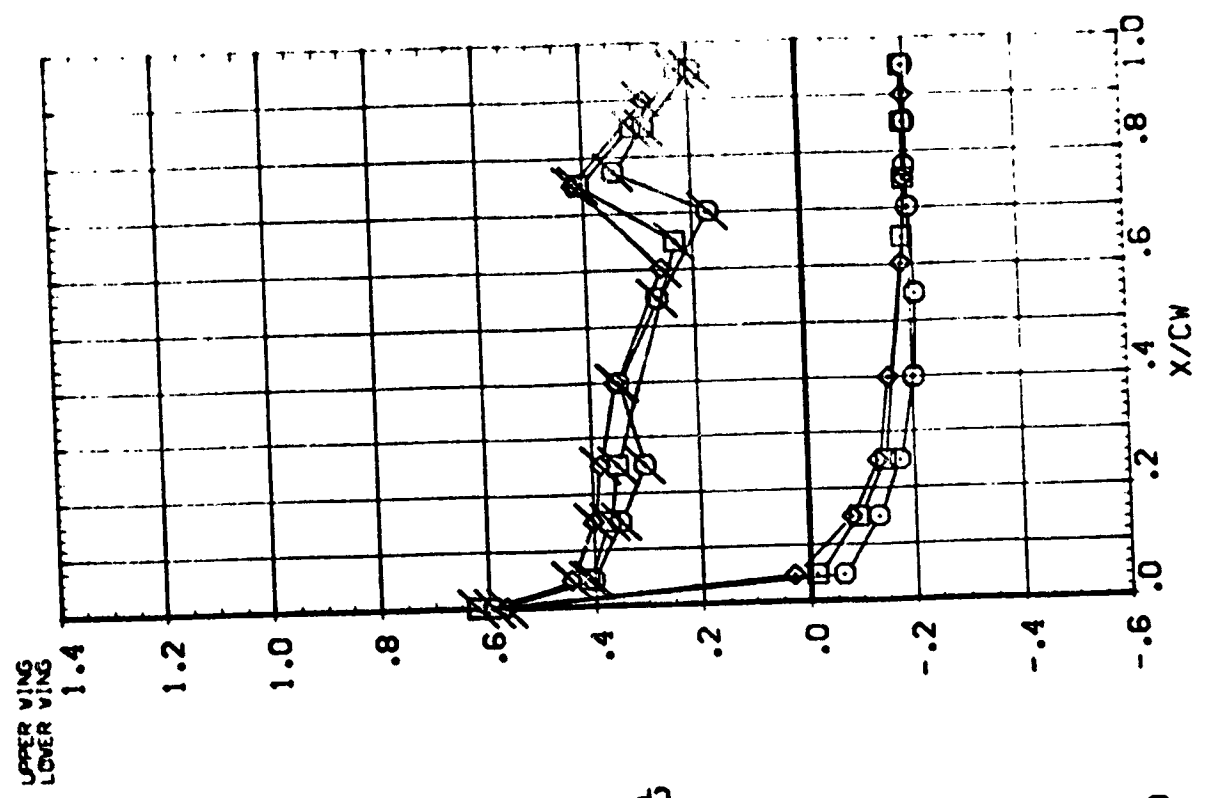


PARAMETRIC VALUES
ALPHA 10.000 RUDER 10.000
ELEVON 10.000 RUDER 10.000



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA 10.000 RUDER 1000
 ELEVON 10.000 RUD. 2 40.000



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RUC-09) OPEN AVES 87-707 DAI2 C2A
 (RUC-09) FLAGGED AVES 87-707 DAI2 C2A

SYMBOL V/BM BETA MACH
 0.673 2.498
 0.780
 0.887

CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 10.000 RUDDER .000
 10.000 RUDDER 40.000

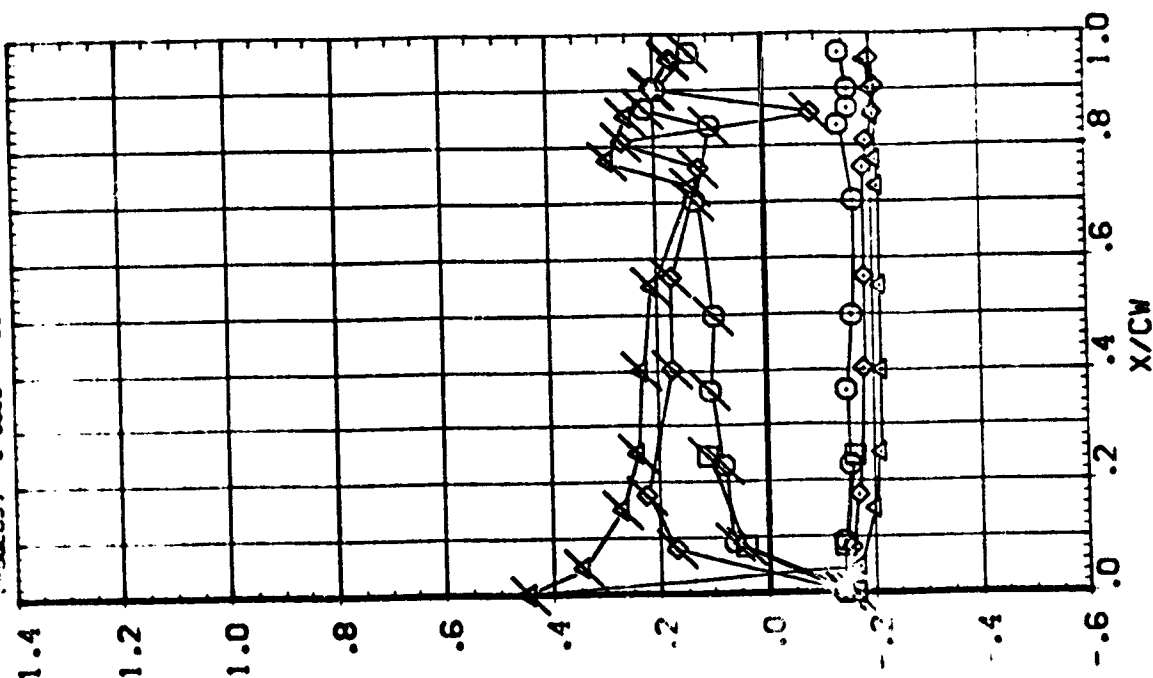
ALPHA
 ELEVON

BE TA 6.700 MACH 7.498

SYMBOL V/BN
 .299
 .364
 .427
 .534

UPPER WING
 LOWER WING

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RBC-09) OPEN AYES 87-707 CA12 OZA
 (RBC-09) FLASSEC AYES 87-707 CA12 OZA



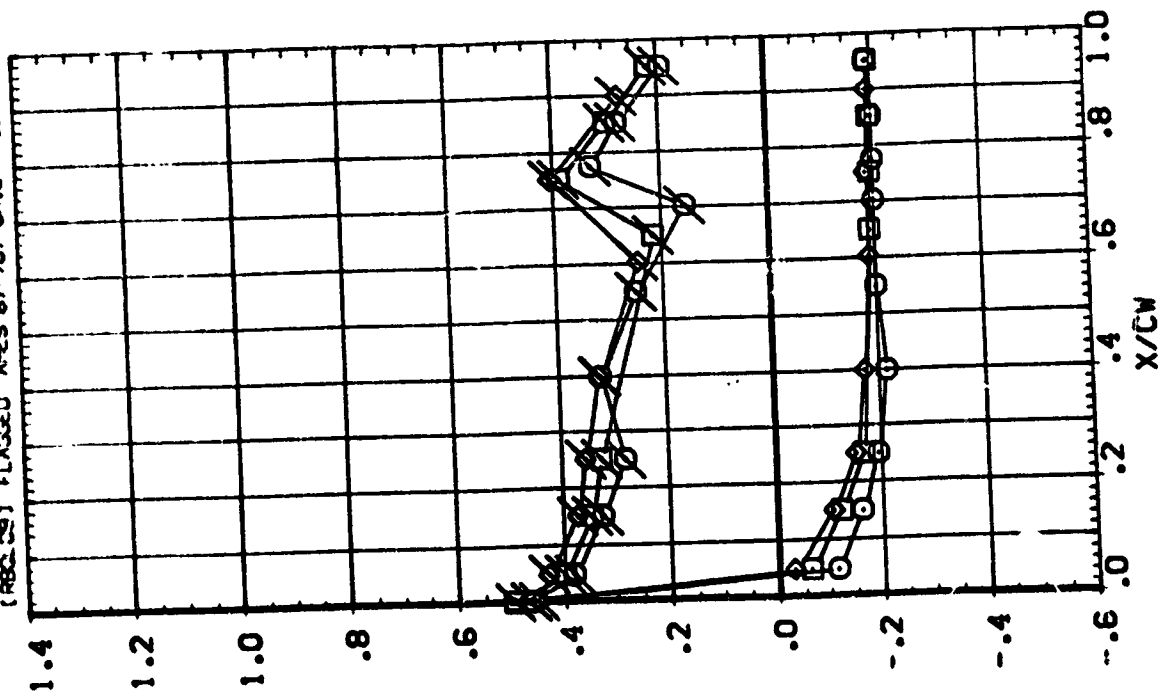
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

ELEV 40.000
 10.000
 40.000

SYMBOL V/BN BETA MA5
 .073 6.700 7.498
 .780
 .887

UPPER WING
 LOWER WING

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [RBC-08] OPEN ARES 87-707 DA12 C2A
 [RBC-08] FLAGGED ARES 87-707 DA12 C2A



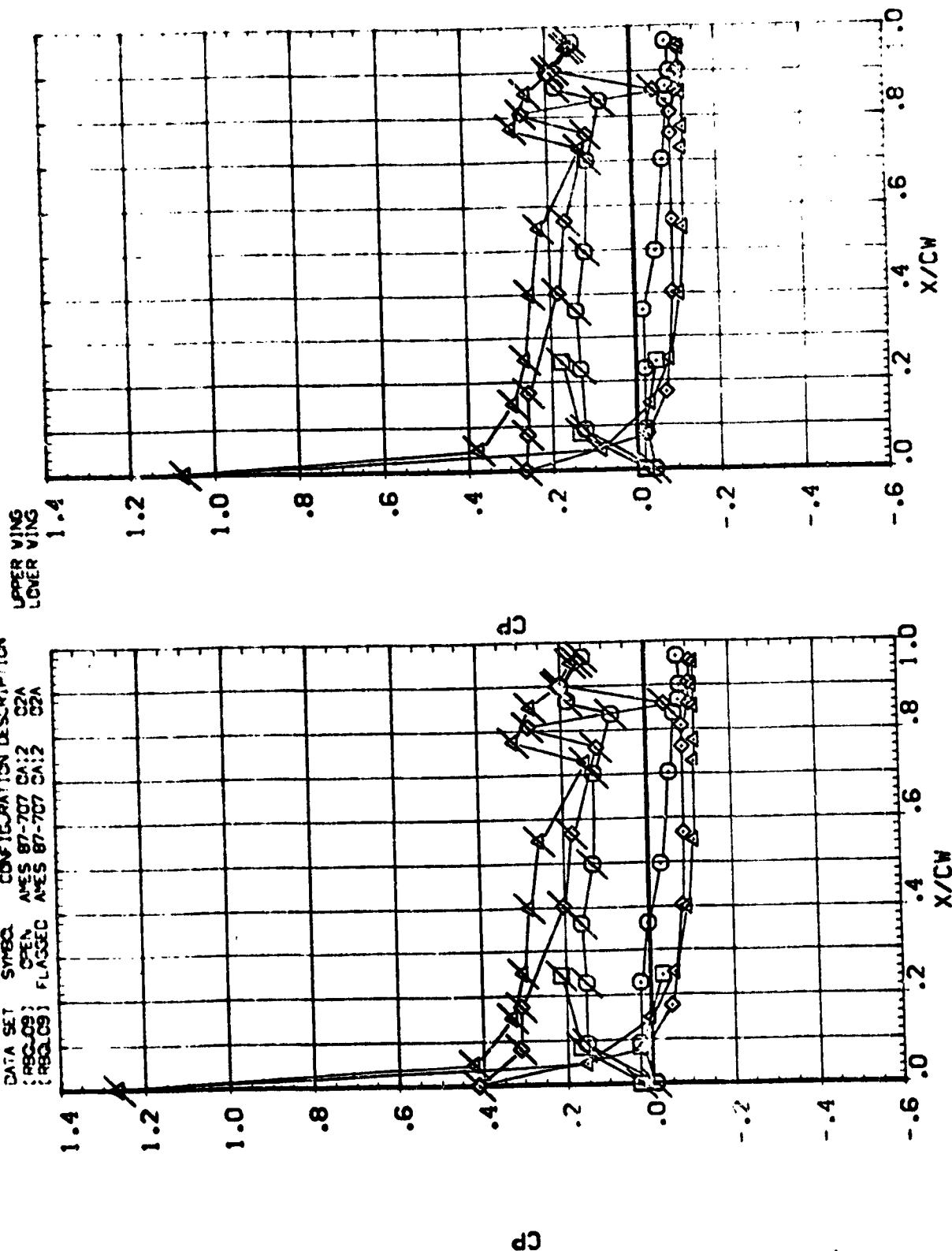
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

SYMBOL V/BV BETA MACH
 ○ .799 -6.750 3.501
 □ .364 -3.450
 ◇ .427
 △ .534

BETA MACH
 -6.750 3.501
 -3.450

PARAMETRIC VALUES
 ALPHA 10.000 RUDDER 10.000
 ELEVON 10.000

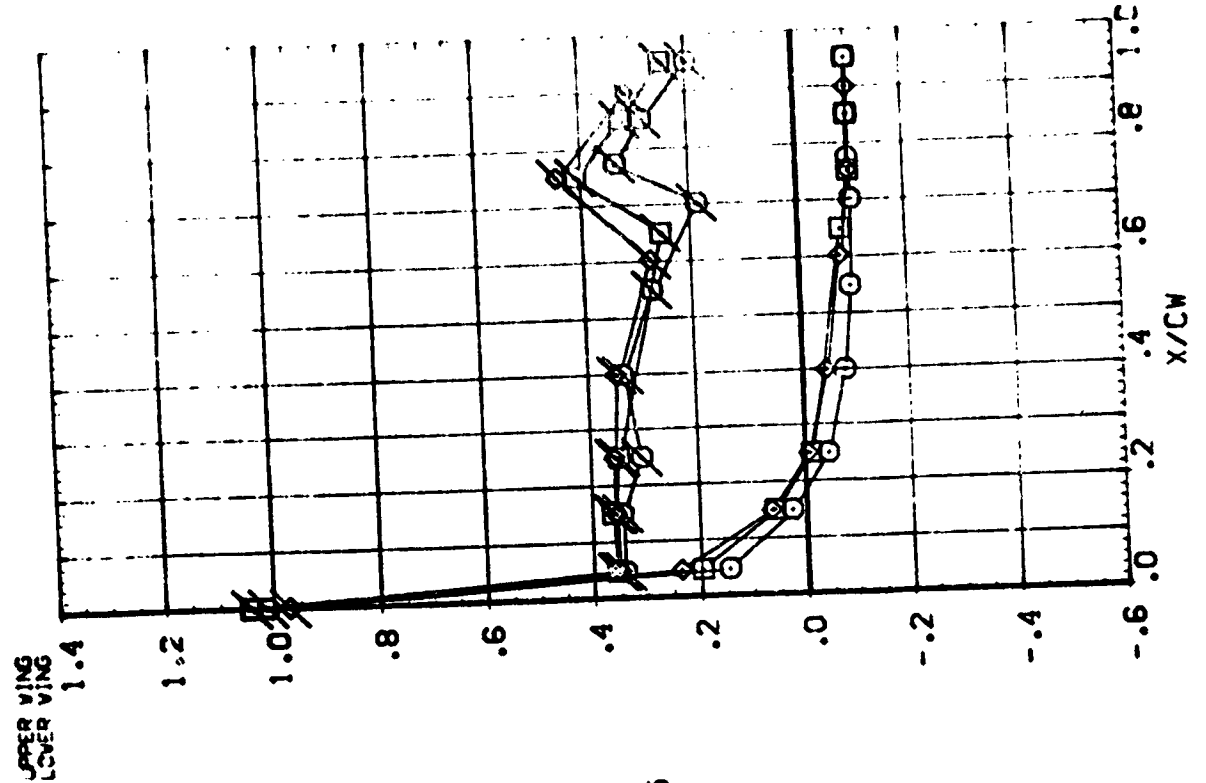
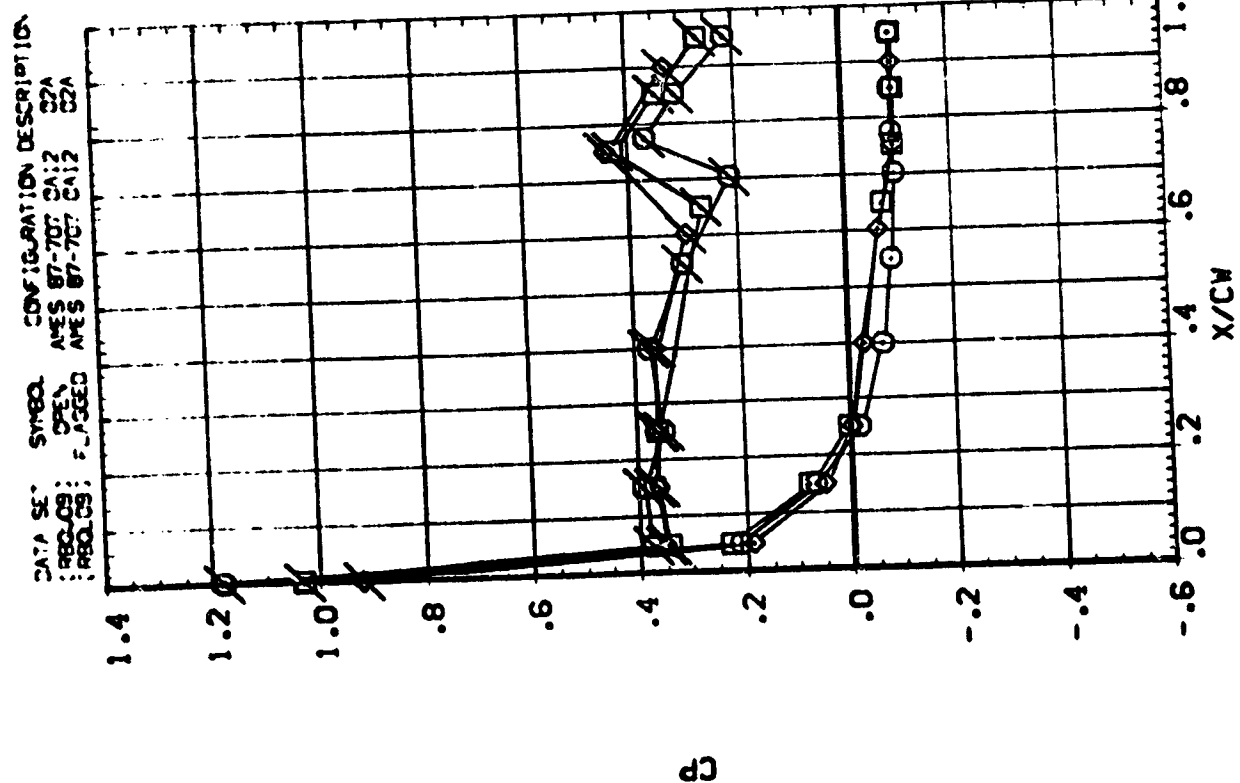
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RBCLOS) OPEN AMES 87-707 CA:2 C2A
 (RBCLOS) FLAGGED AMES 87-707 CA:2 C2A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA 2.000 2.000 2.000
 ELEVON 2.000 2.000 2.000

SYMBOL V/BV BE/A WAC
 .673 -6.750 3.501
 .780 -3.450
 .887



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

SYMBOL: ∇ \circ \triangle \diamond \times

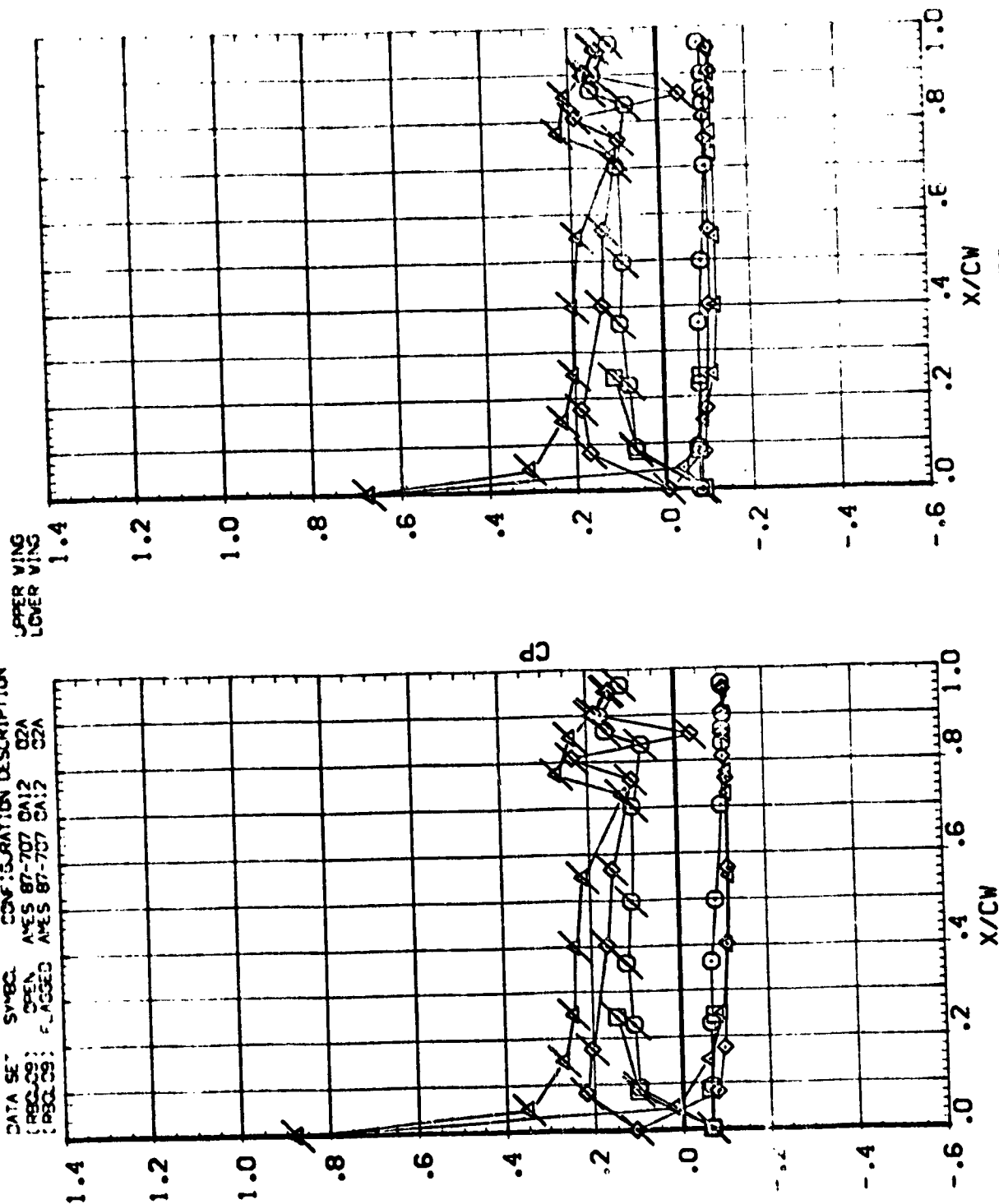
BETA: .160
3.13C

WACH: 3.501

ALPHA: 10.00C
ELEVON: 10.00C

PARAMETRIC VALUES: .00C
RUDDER: 10.00C
RUDDER: 10.00C

DATA SET: CONF: SUBRATTON DESCRIPTION
[PBC:09] AMES 87-707 DAI2 02A
[PBC:09] FLAGGED AMES 87-707 DAI2 02A

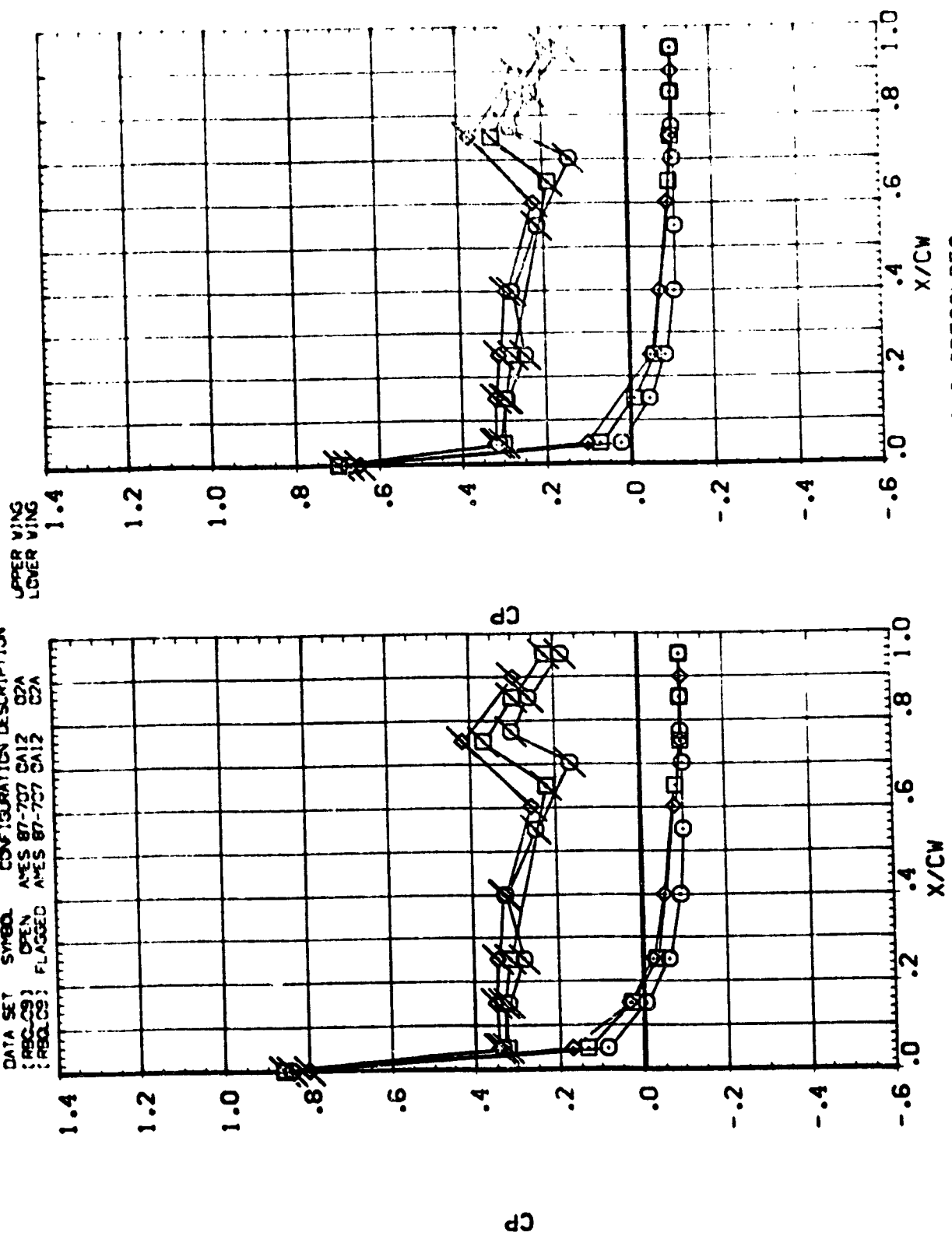


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA 10.000 RUDR 40.000
 ELEVON 10.000 RUDR 40.000

SYMBOL Y/BV BETA MACH
 .673 .160 3.501
 .780 3.130
 .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 :REC-29: OPEN AMES 87-707 CAL2 C2A
 :RBL-29: FLAGGED AMES 87-707 CAL2 C2A



III

SYMBOL

V/B
.299
.364
.427
.534

BETA 6.44C

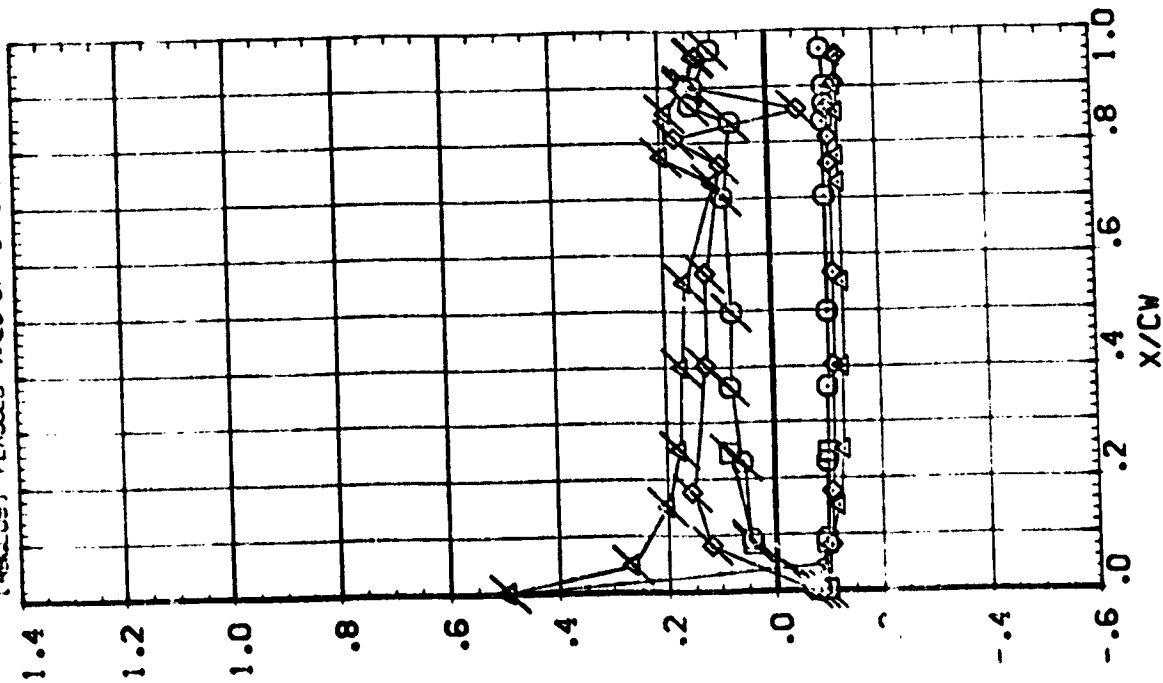
MACH 3.501

PARAMETRIC VALUES
10.000 RUDDER
10.000 RUDDER

ALPHA
ELEVON

DATA SET SYMBOL CONFIGURATION DESCRIPTION
(REQ. 09) OPEN ANES 87-707 CA12 CZA
(REQ. 09) FLAGGED ANES 87-707 CA12 CZA

UPPER WING
LOWER WING

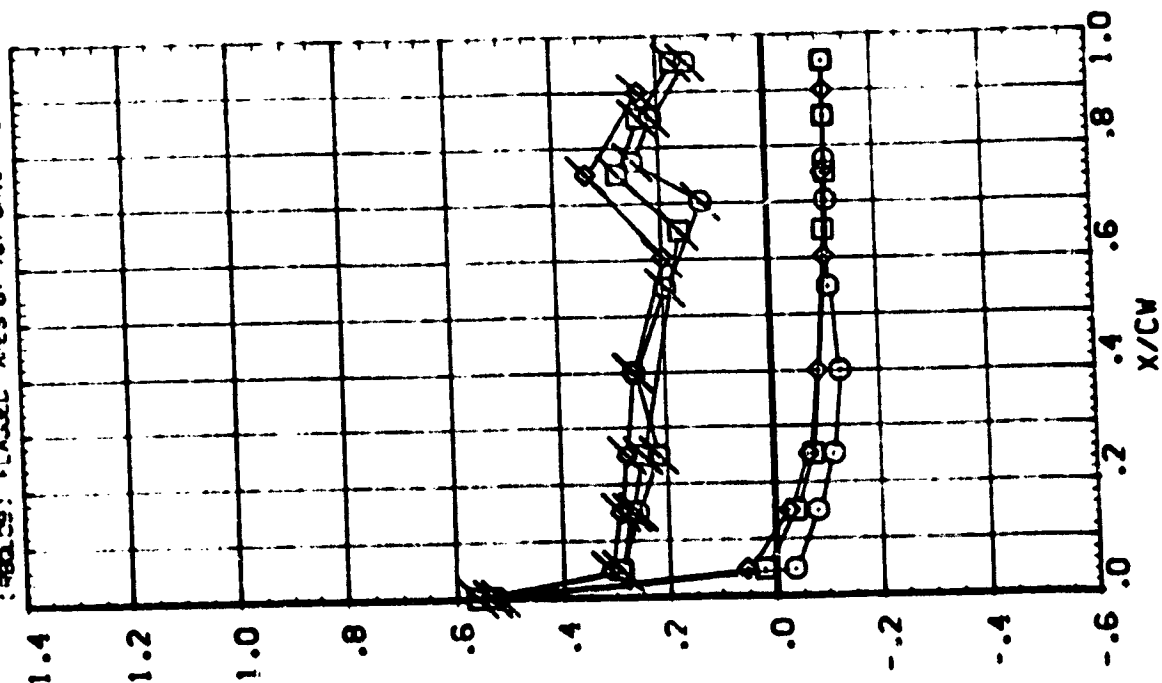


ST-V. 212.3456

Symbol	Value	Symbol	Value
548C	.673	67A	6.440
110C	.78C		
101C	.88C		
		WAC	3.501

UPPER VINING
LOWER VINING

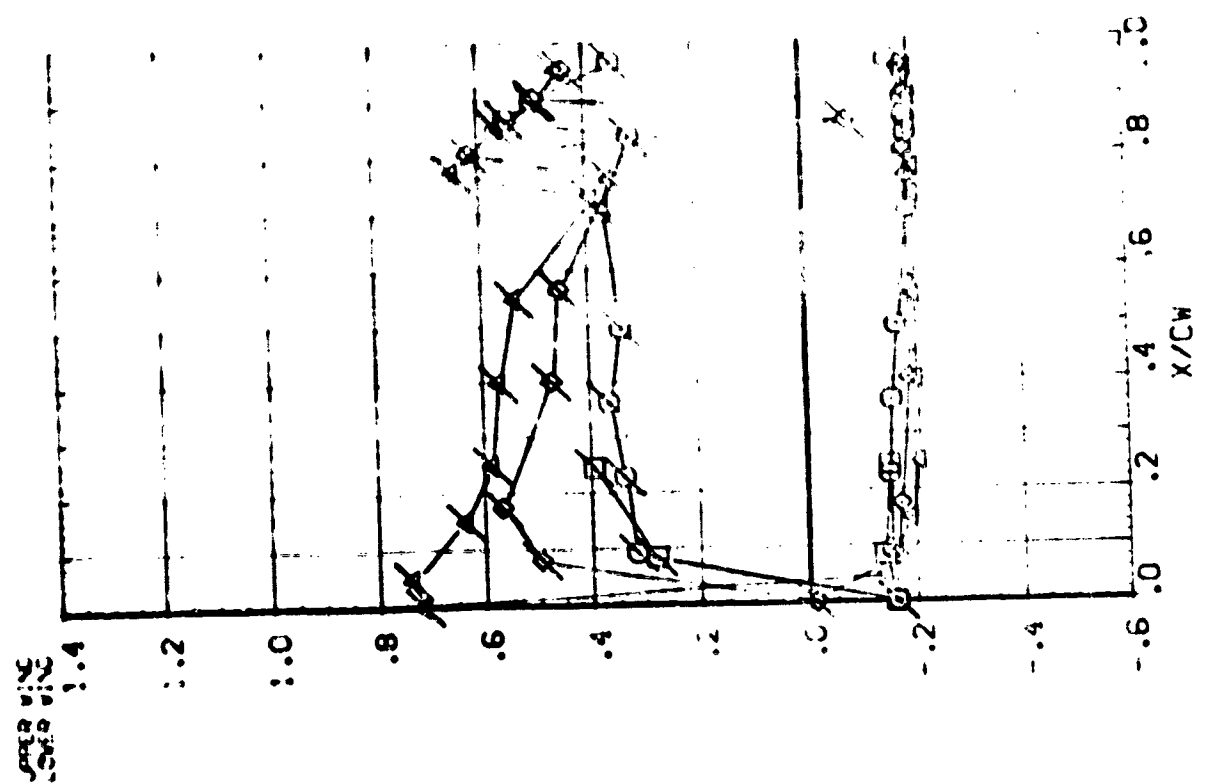
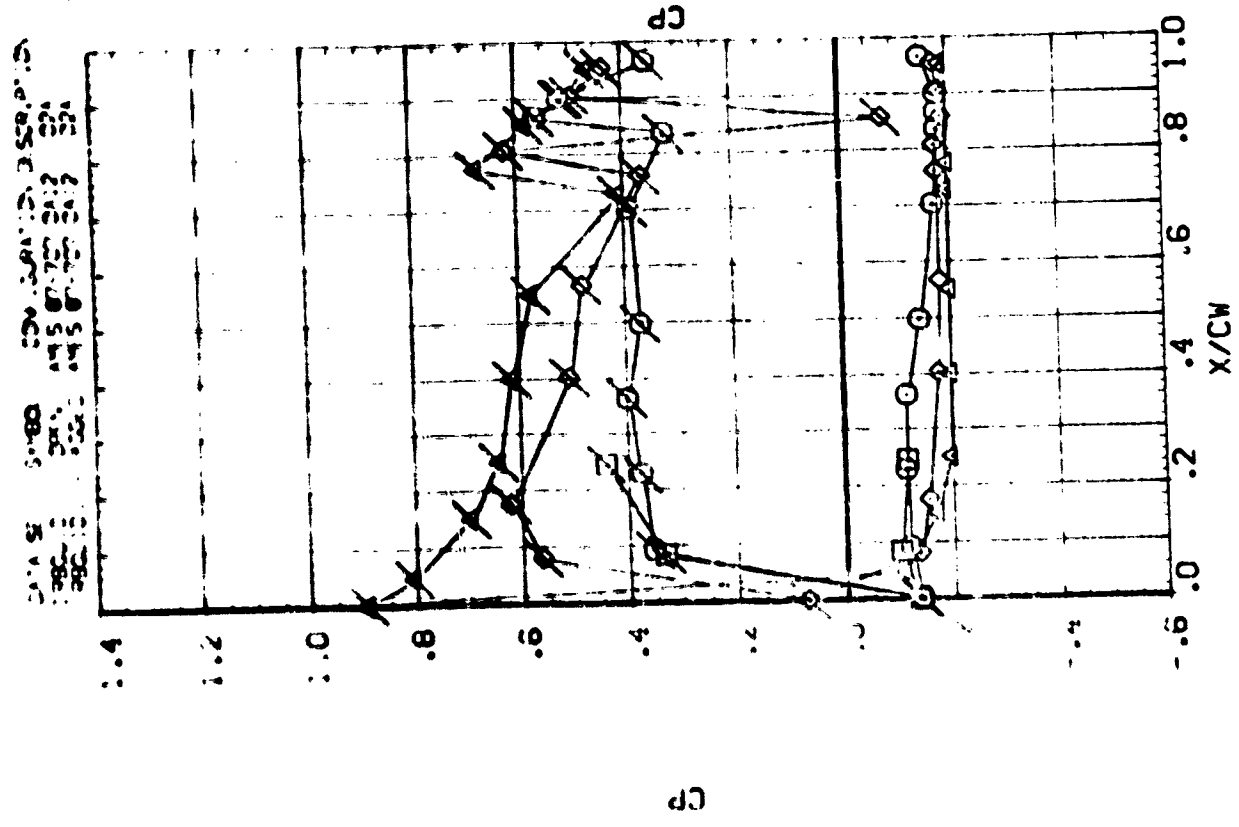
DATA SET	SYMBOL	CONFIGURATION	DESCRIPTION
AMES 87-737	BA12	C2A	
AMES 87-737	BA12	C2A	
AMES 87-737	BA12	C2A	



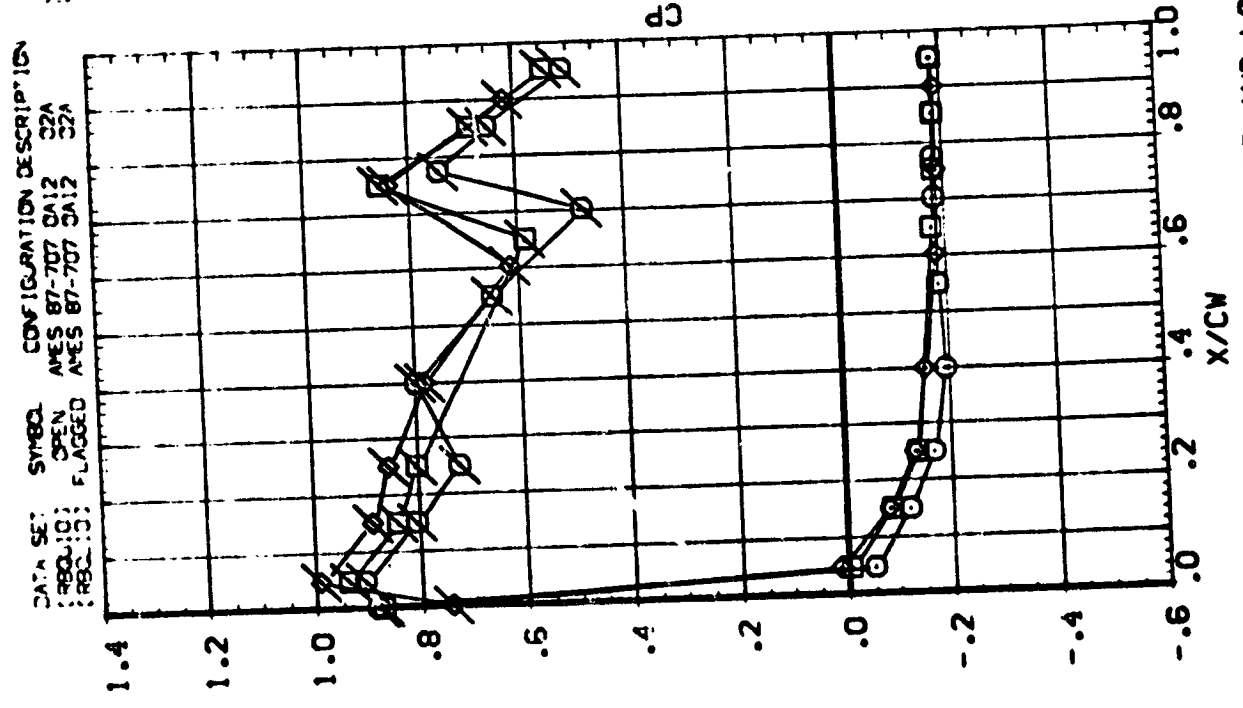
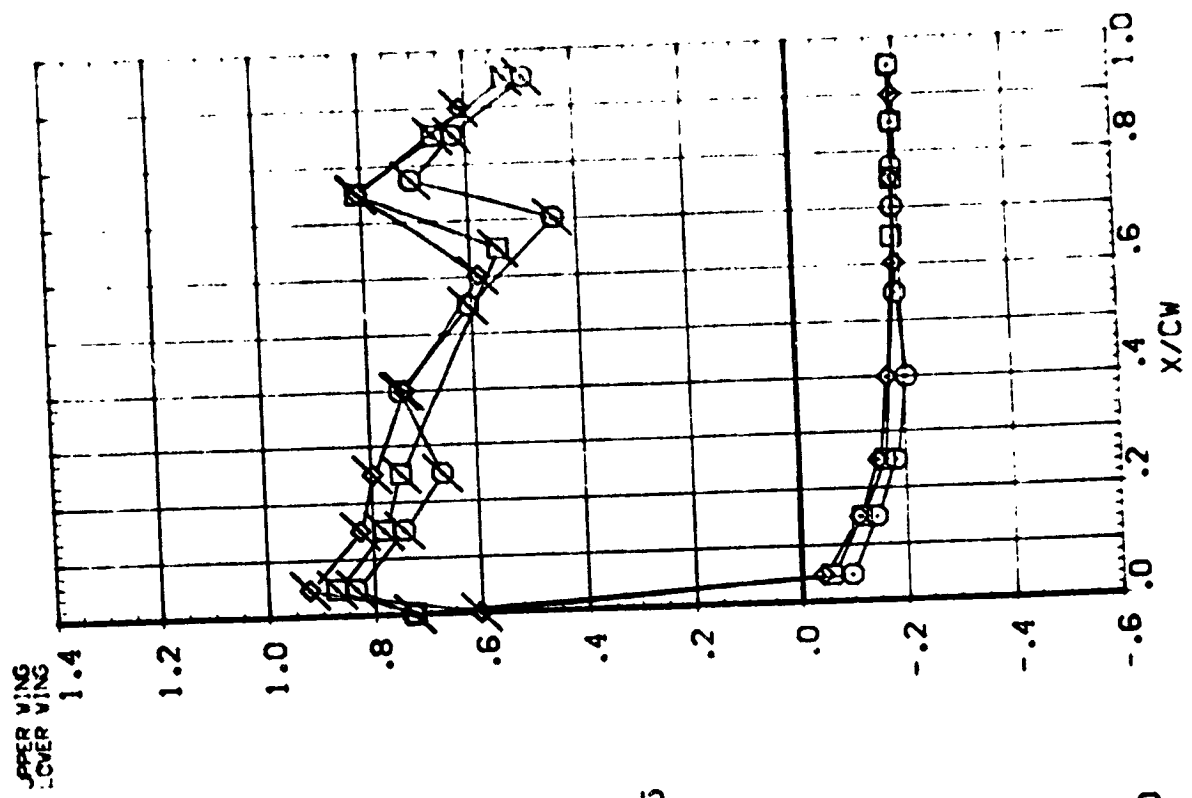
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

608

SECRET
CONFIDENTIAL
SECRET

[illegible]

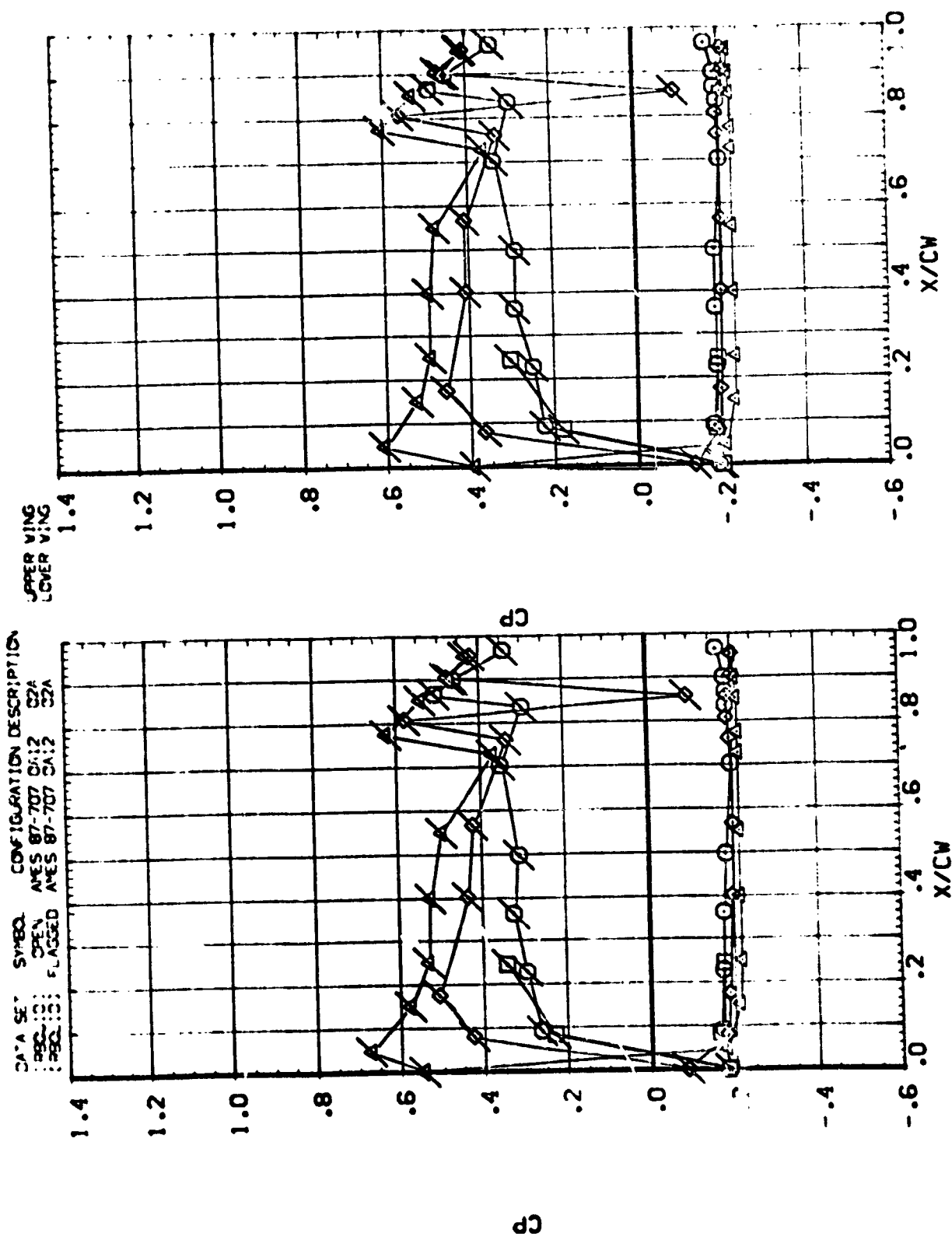
PARAMETER VALUES
 ALPHA 20.000 9.000 40.000
 ELEVON 10.000 20.000



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 REQD 10 OPEN ARES 87-707 DA12 32A
 REQD 11 FLAGGED ARES 87-707 DA12 32A

SYMBOL Y/B₀ ZETA WACH
 () .573 -6.480 2.498
 () .780 -3.320
 () .887

CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

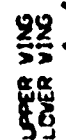


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

2003

2.198

RBC-101
RBC-101
RBC-101
OPEN
AMES 87-707 DAIZ
AMES 87-707 DAIZ
AMES 87-707 DAIZ

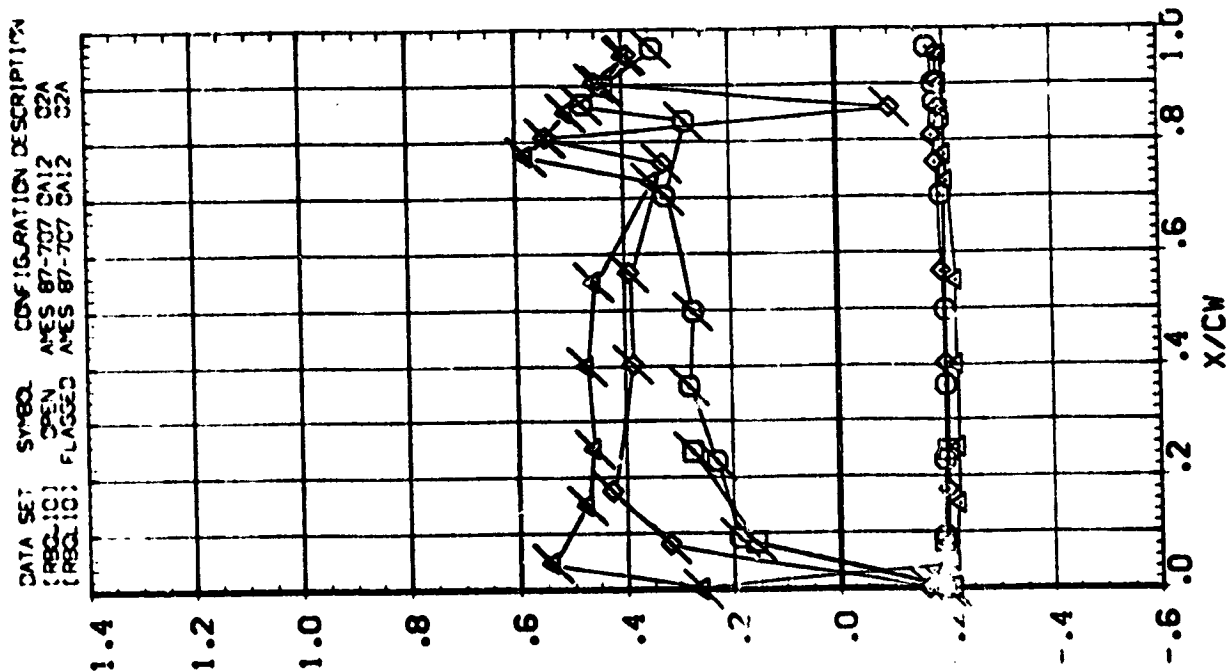


PAGE: 354

PARAMETRIC VALUES
 ALPHA 20.000 RUDER
 ELEVON 10.000 RUDER

SYMBOL Y/BV BETA WAC
 0.789 6.24C 7.498
 0.364
 0.427
 0.534

UPPER WING
 LOWER WING



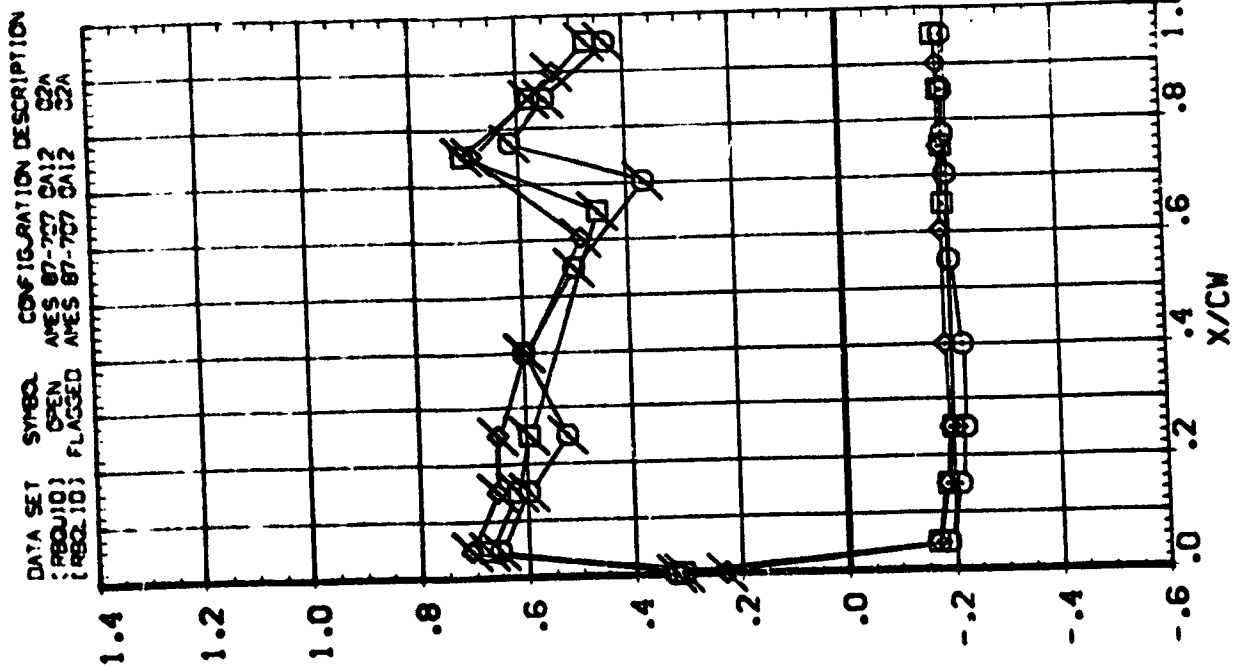
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA 20.000 RUDER .000
 ELEVON 10.000 RUDDER 40.000

SYNCH 1/8" .673
 .78C
 .887

BETA 6.24C
 WAC- 2.498

UPPER WING
 LOWER WING

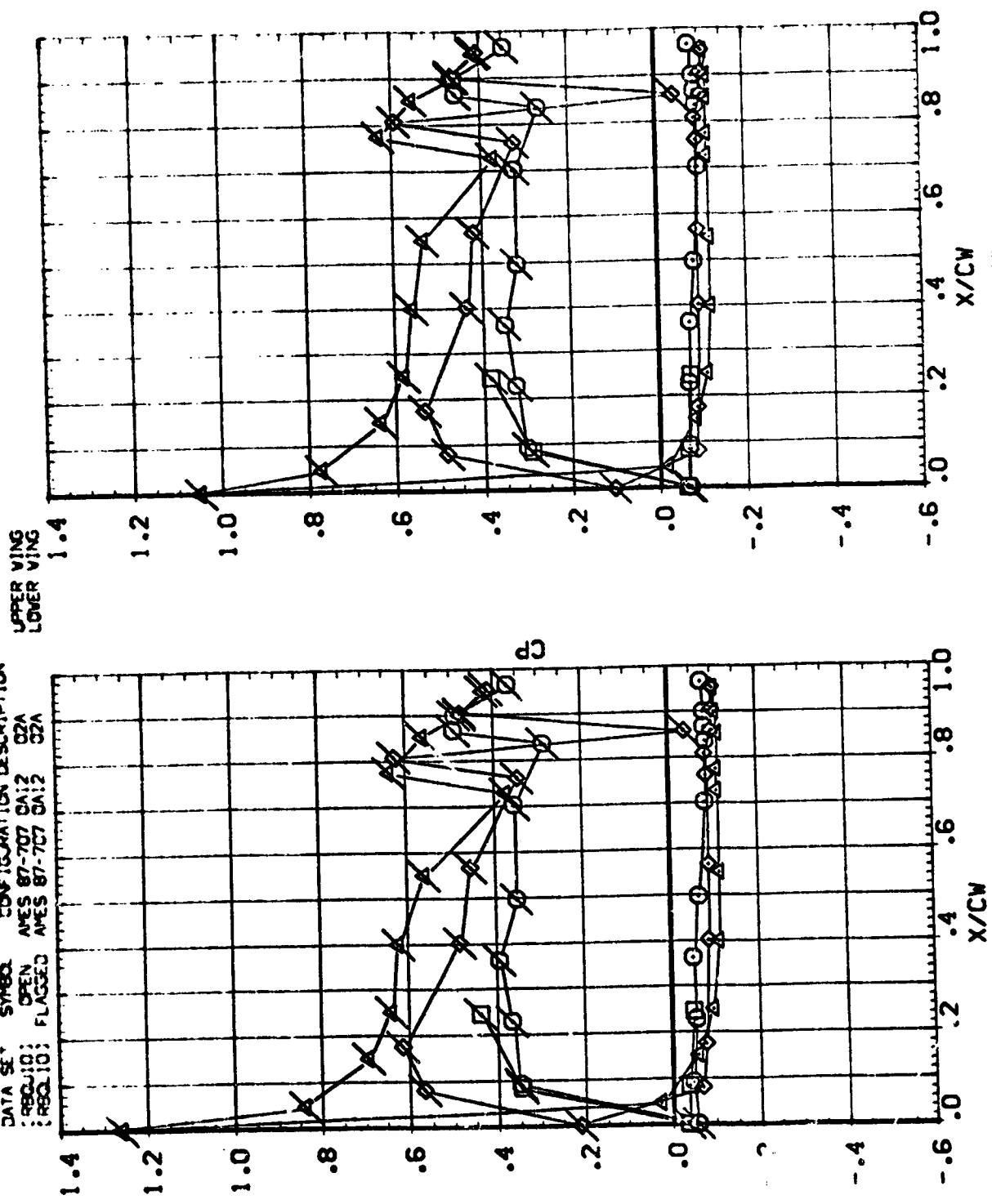


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA 20.000 RUDER 300
 ELEVON 30.000 RUDER 40.000

SYMBOLS
 799
 .364
 .427
 .534
 BETA 6.710 3.440
 "MAC" 3.501

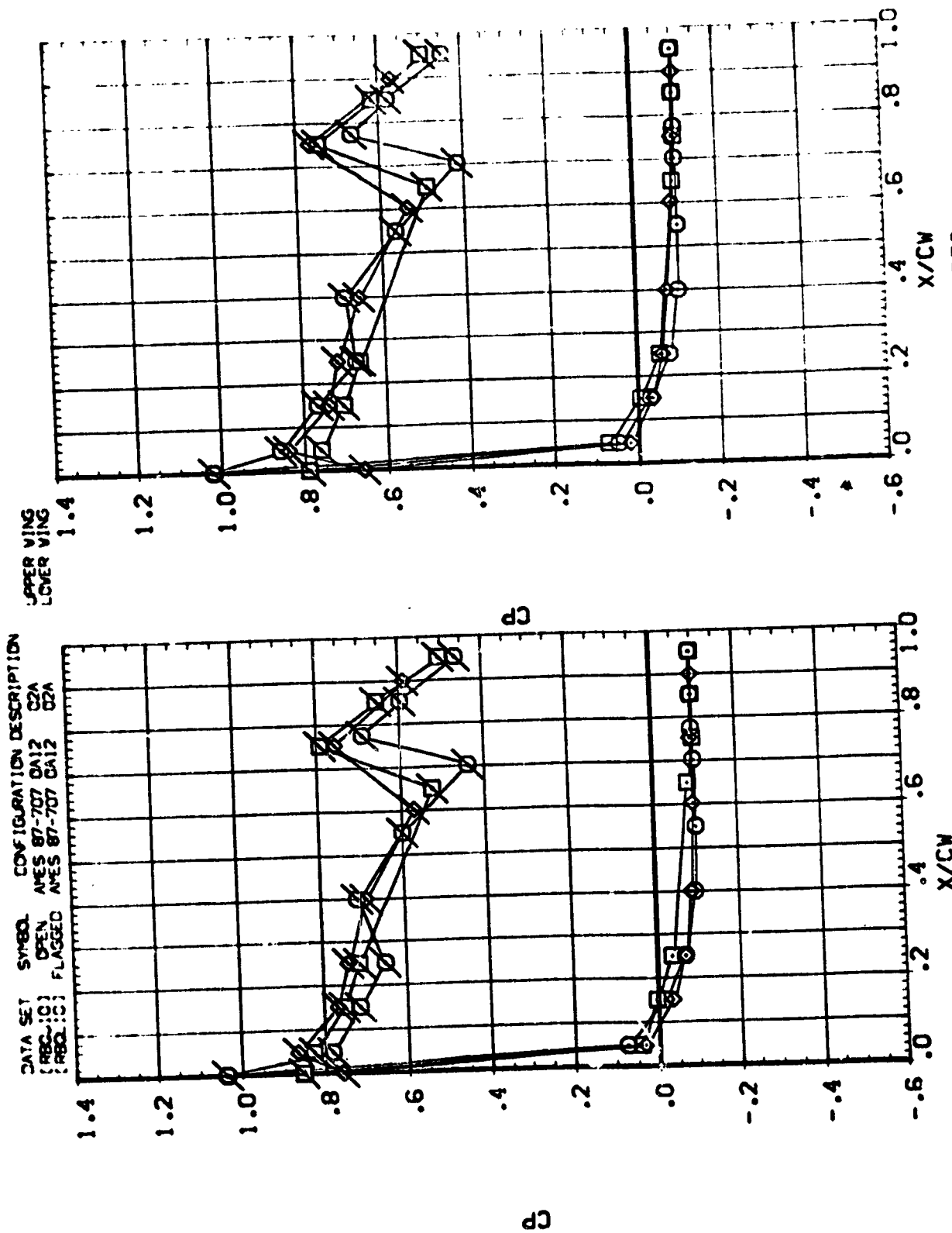
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 :REQ10: OPEN AMES 87-707 GA:2 GA:2
 :REQ10: FLANGED AMES 87-707 GA:2 GA:2



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA 20.000 R.DOF 9
 ELEVON 10.000 R.DOF 9

SYMBOL V/BN BETA MACH
 .673 -6.71C 3.501
 .78C -3.440
 .887

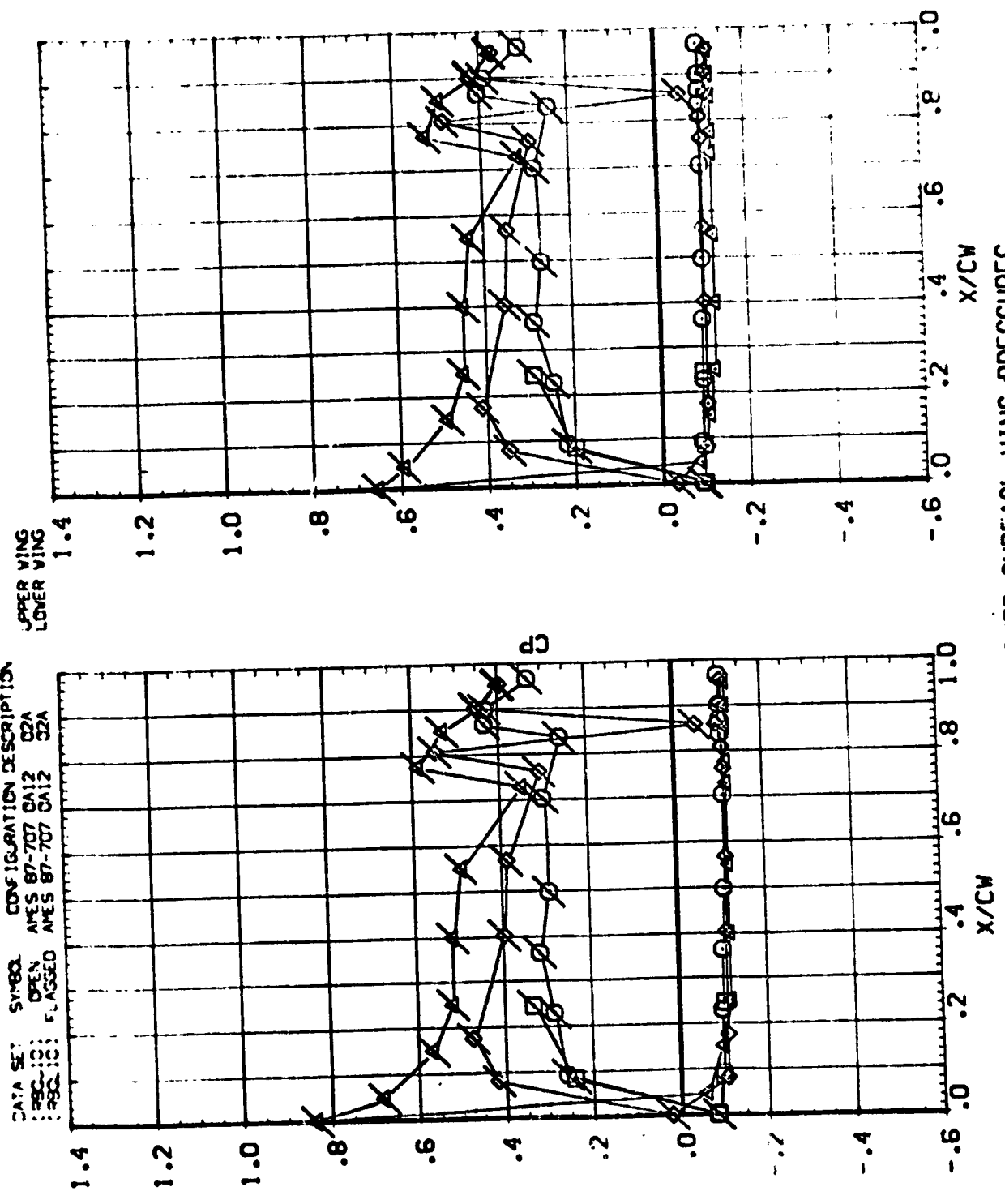


PARAMETRIC VALUES
 ALPHA 20.000
 ELEVON 10.000
 RUDDER 40.000

BETA 1.50
 MACH 3.501

SYMBOL
 1/30
 .299
 .364
 .427
 .534

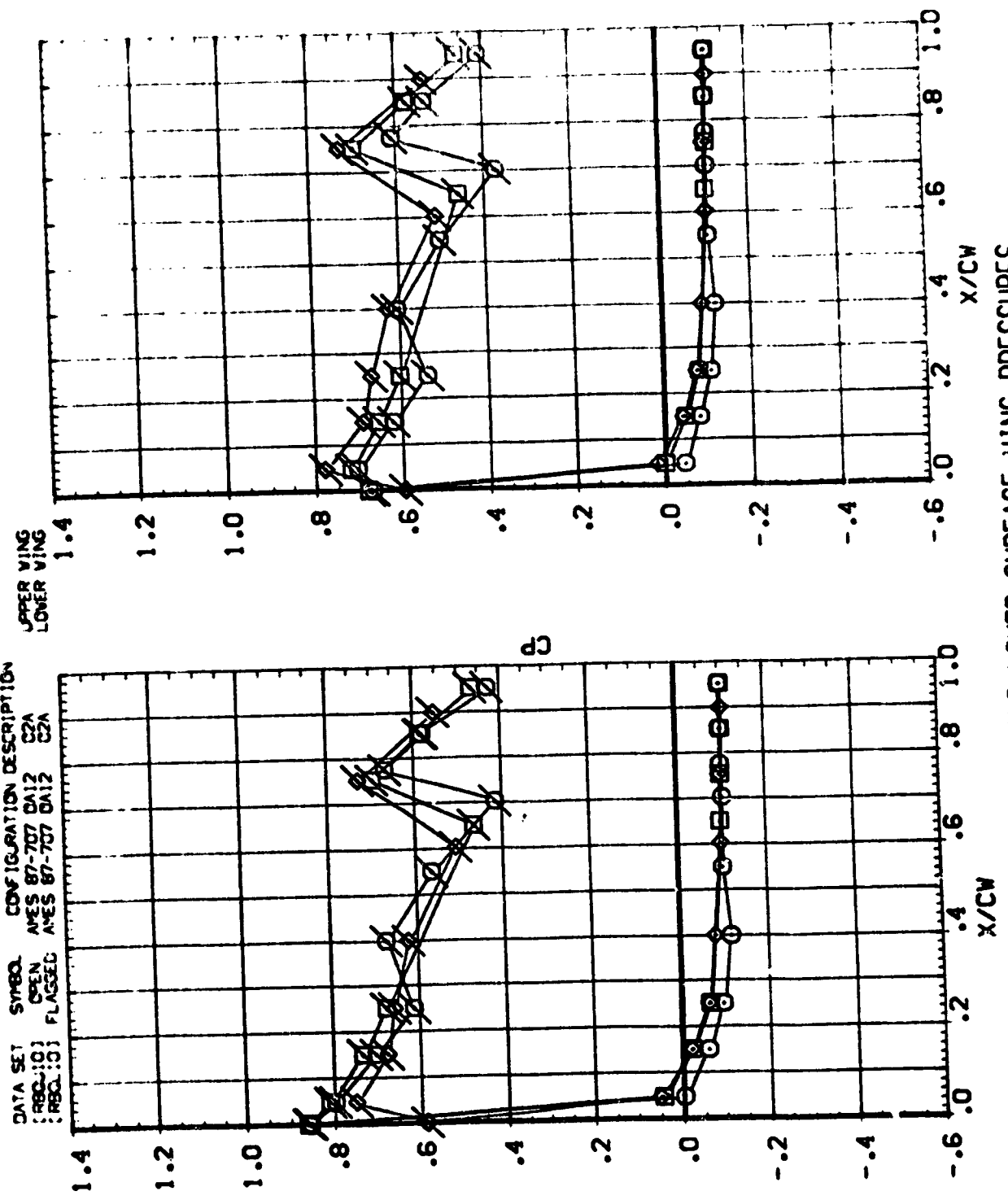
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 88C 10 OPEN APES 87-707 QAI2 Q2A
 88C 10 CLASSED APES 87-707 QAI2 Q2A



PARAMETRIC VALUES
 ALPHA 20.000 20.000 20.000
 ELEV 10.000 10.000 10.000

SYMBOL 1/3N .673 .78C .887
 BETA .15C 3.160
 MACH 3.501

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 RBQ:10 OPEN AYES 87-707 DA12 C2A
 RBQ:10 FLAGGED AYES 87-707 DA12 C2A



PARAMETRIC VALUES
 70.000 RUDER 40.000
 10.000 RUDER

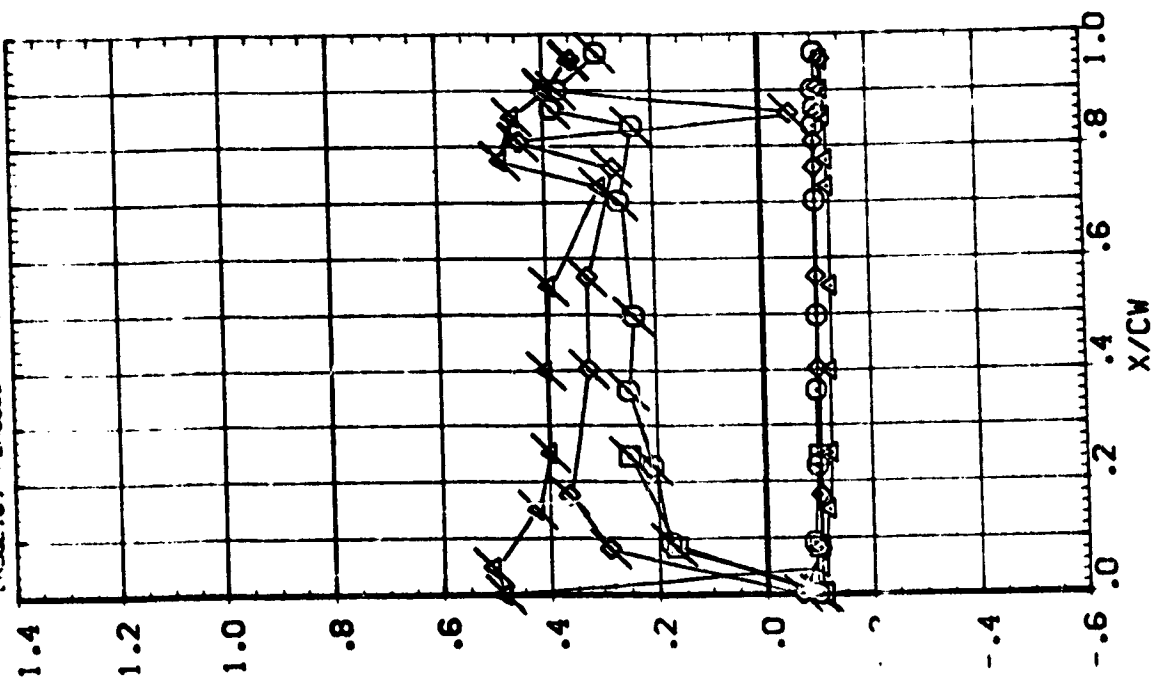
ALPHA
 ELEVON

BETA 6.48C 3.50:

SYMBOL 1/BN
 .299
 .364
 .477
 .534

UPPER WING
 LOWER WING

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 : REG-101 AMES 87-707 DA12 C2A
 : REG-101 AMES 87-707 DA12 C2A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 20.000 RUDER .000
 10.000 RUDLR 40.000

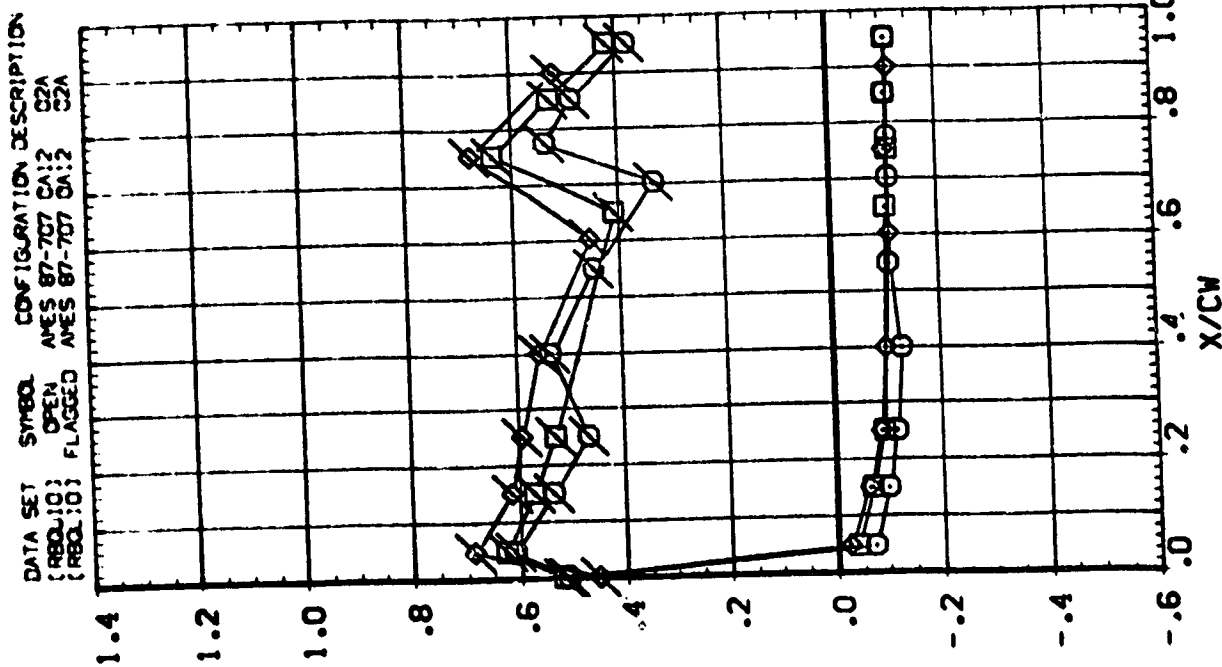
ALPHA
 ELEVON

BE'A 6.48C
 "ACH 3.501

V/BV .673
 .78C
 .887

SYMBOL
 O: : O

UPPER WING
 LOWER WING

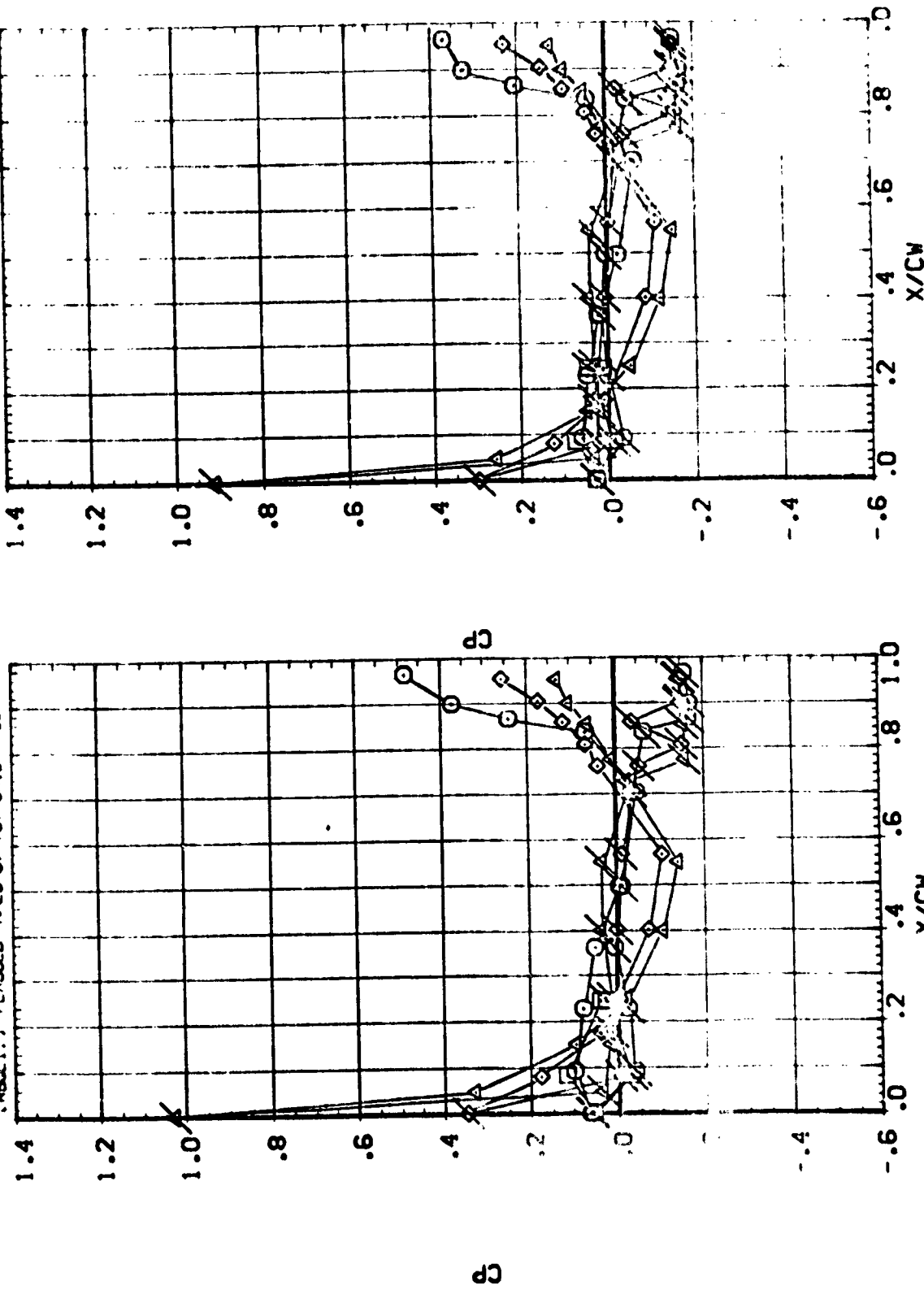


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA .000
 ELEVON .000
 RUDDER .000
 40.000

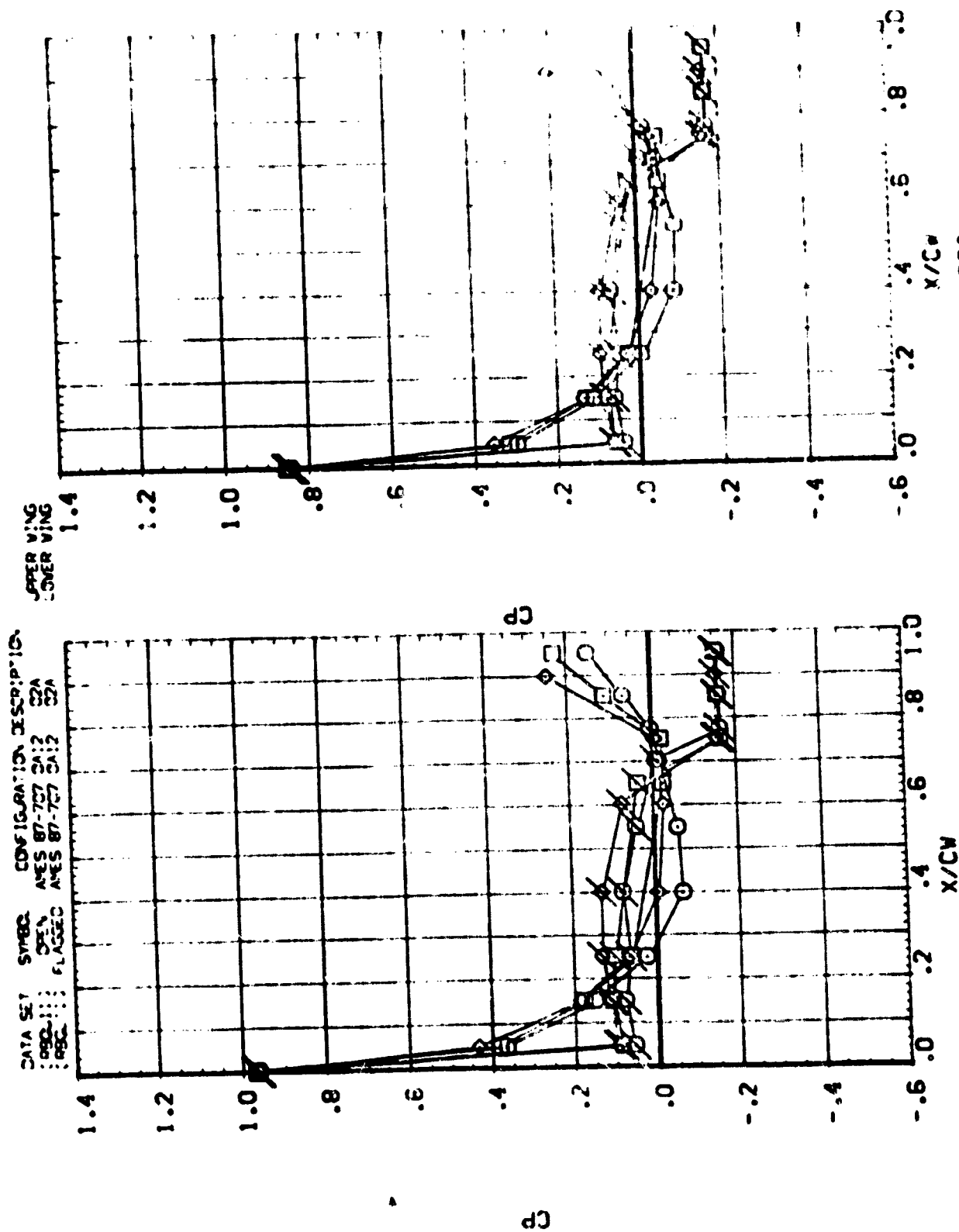
SYMBOL V/30 BETA MACH
 .799 -6.440 2.198
 .364 -3.300
 .427
 .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 :REQ: : OPEN AMES 87-707 CA12 C2A
 :REQ: : FLAGGED AMES 87-707 CA12 C2A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

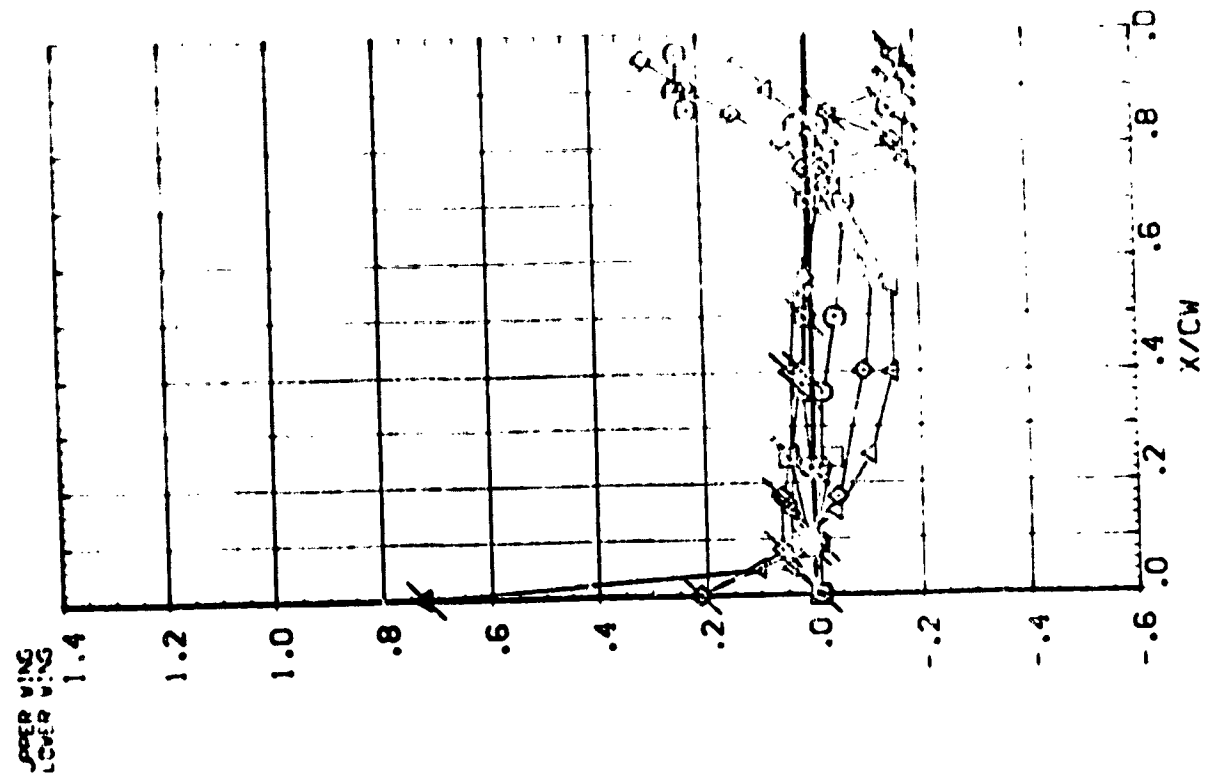
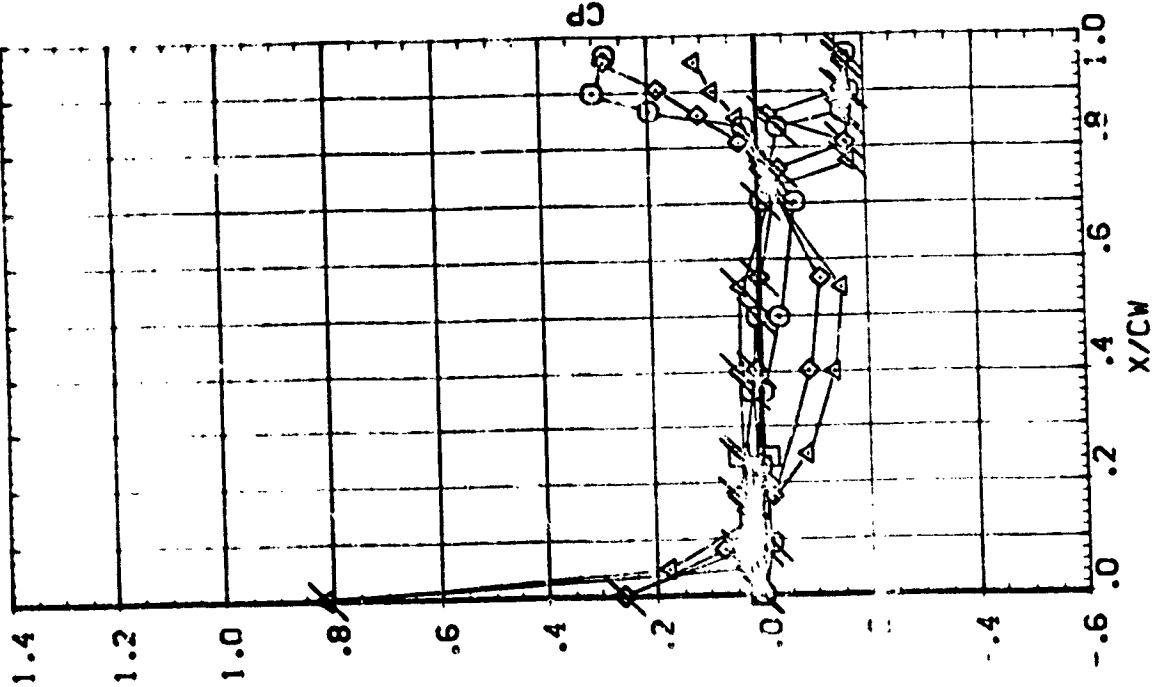
54580	4.78	3E'A	WACM
54581	6.73	-6.44C	2.198
54582	.78C	3.30C	
54583	.087		



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

1111
22
33
44
55
66
77
88
99
1010
1111
1212
1313
1414
1515
1616
1717
1818
1919
2020
2121
2222
2323
2424
2525
2626
2727
2828
2929
3030
3131
3232
3333
3434
3535
3636
3737
3838
3939
4040
4141
4242
4343
4444
4545
4646
4747
4848
4949
5050
5151
5252
5353
5454
5555
5656
5757
5858
5959
6060
6161
6262
6363
6464
6565
6666
6767
6868
6969
7070
7171
7272
7373
7474
7575
7676
7777
7878
7979
8080
8181
8282
8383
8484
8585
8686
8787
8888
8989
9090
9191
9292
9393
9494
9595
9696
9797
9898
9999
100100
101101
102102
103103
104104
105105
106106
107107
108108
109109
110110
111111
112112
113113
114114
115115
116116
117117
118118
119119
120120
121121
122122
123123
124124
125125
126126
127127
128128
129129
130130
131131
132132
133133
134134
135135
136136
137137
138138
139139
140140
141141
142142
143143
144144
145145
146146
147147
148148
149149
150150
151151
152152
153153
154154
155155
156156
157157
158158
159159
160160
161161
162162
163163
164164
165165
166166
167167
168168
169169
170170
171171
172172
173173
174174
175175
176176
177177
178178
179179
180180
181181
182182
183183
184184
185185
186186
187187
188188
189189
190190
191191
192192
193193
194194
195195
196196
197197
198198
199199
200200
201201
202202
203203
204204
205205
206206
207207
208208
209209
210210
211211
212212
213213
214214
215215
216216
217217
218218
219219
220220
221221
222222
223223
224224
225225
226226
227227
228228
229229
230230
231231
232232
233233
234234
235235
236236
237237
238238
239239
240240
241241
242242
243243
244244
245245
246246
247247
248248
249249
250250
251251
252252
253253
254254
255255
256256
257257
258258
259259
260260
261261
262262
263263
264264
265265
266266
267267
268268
269269
270270
271271
272272
273273
274274
275275
276276
277277
278278
279279
280280
281281
282282
283283
284284
285285
286286
287287
288288
289289
290290
291291
292292
293293
294294
295295
296296
297297
298298
299299
300300
301301
302302
303303
304304
305305
306306
307307
308308
309309
310310
311311
312312
313313
314314
315315
316316
317317
318318
319319
320320
321321
322322
323323
324324
325325
326326
327327
328328
329329
330330
331331
332332
333333
334334
335335
336336
337337
338338
339339
340340
341341
342342
343343
344344
345345
346346
347347
348348
349349
350350
351351
352352
353353
354354
355355
356356
357357
358358
359359
360360
361361
362362
363363
364364
365365
366366
367367
368368
369369
370370
371371
372372
373373
374374
375375
376376
377377
378378
379379
380380
381381
382382
383383
384384
385385
386386
387387
388388
389389
390390
391391
392392
393393
394394
395395
396396
397397
398398
399399
400400
401401
402402
403403
404404
405405
406406
407407
408408
409409
410410
411411
412412
413413
414414
415415
416416
417417
418418
419419
420420
421421
422422
423423
424424
425425
426426
427427
428428
429429
430430
431431
432432
433433
434434
435435
436436
437437
438438
439439
440440
441441
442442
443443
444444
445445
446446
447447
448448
449449
450450
451451
452452
453453
454454
455455
456456
457457
458458
459459
460460
461461
462462
463463
464464
465465
466466
467467
468468
469469
470470
471471
472472
473473
474474
475475
476476
477477
478478
479479
480480
481481
482482
483483
484484
485485
486486
487487
488488
489489
490490
491491
492492
493493
494494
495495
496496
497497
498498
499499
500500
501501
502502
503503
504504
505505
506506
507507
508508
509509
510510
511511
512512
513513
514514
515515
516516
517517
518518
519519
520520
521521
522522
523523
524524
525525
526526
527527
528528
529529
530530
531531
532532
533533
534534
535535
536536
537537
538538
5395

3.22

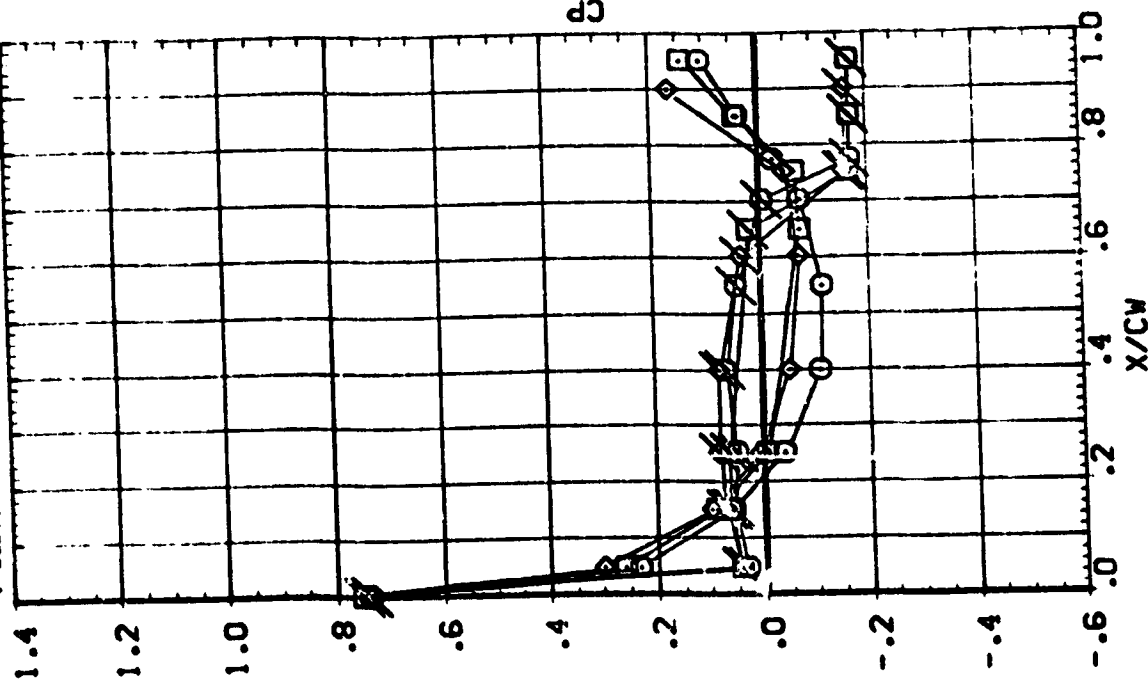
[illegible]

CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

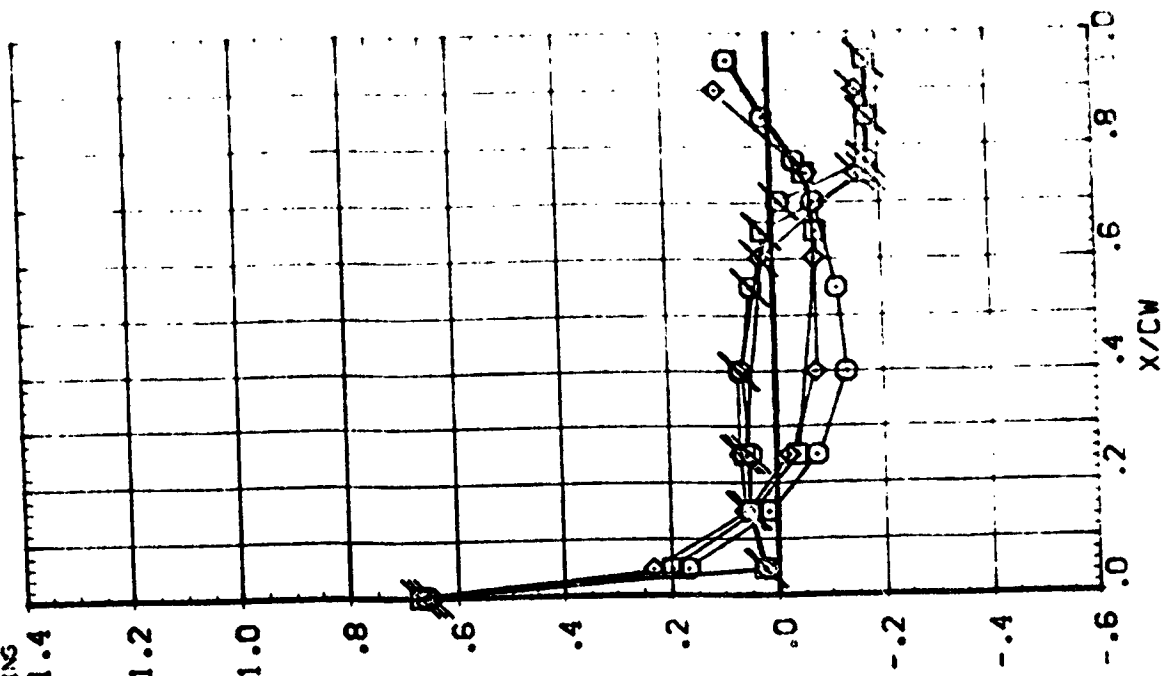
10 0
 .78C
 .687

3.57C

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 RECU OPEN ANES 87-707 DA12 C2A
 RECU FLAGGED ANES 87-707 DA12 C2A



UPPER WING
 LOWER WING



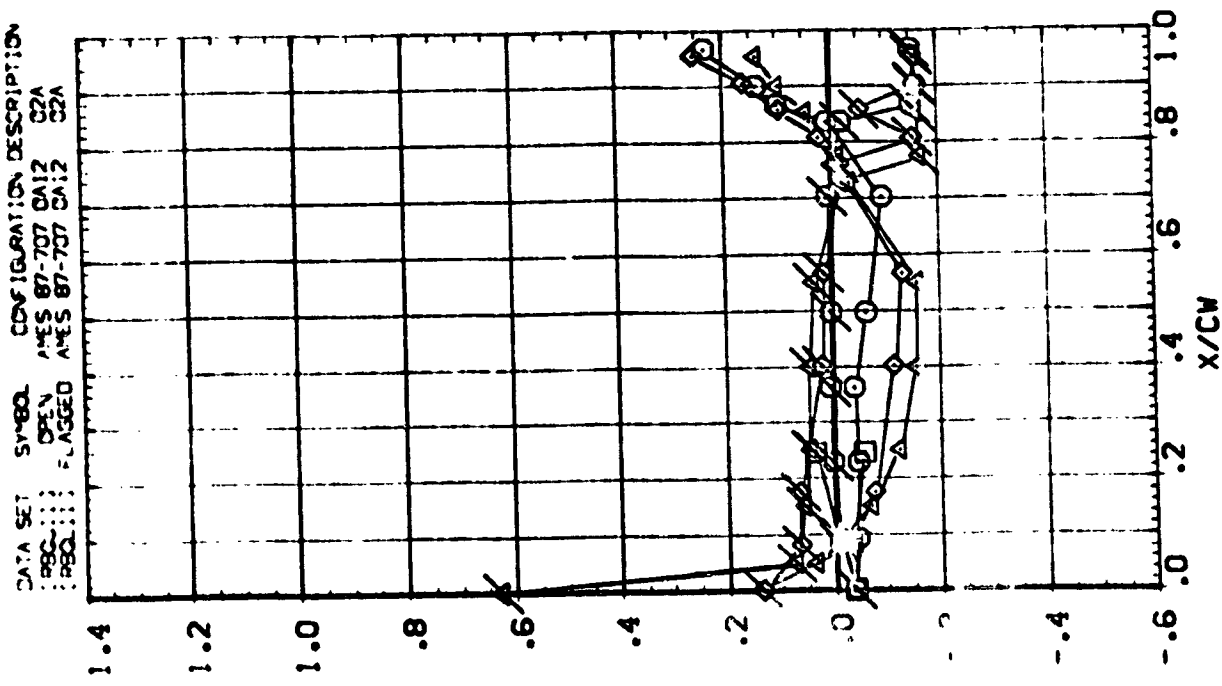
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

ELEVATION 4.000 4.000 4.000

6.300 7.400

.364
.427
.534

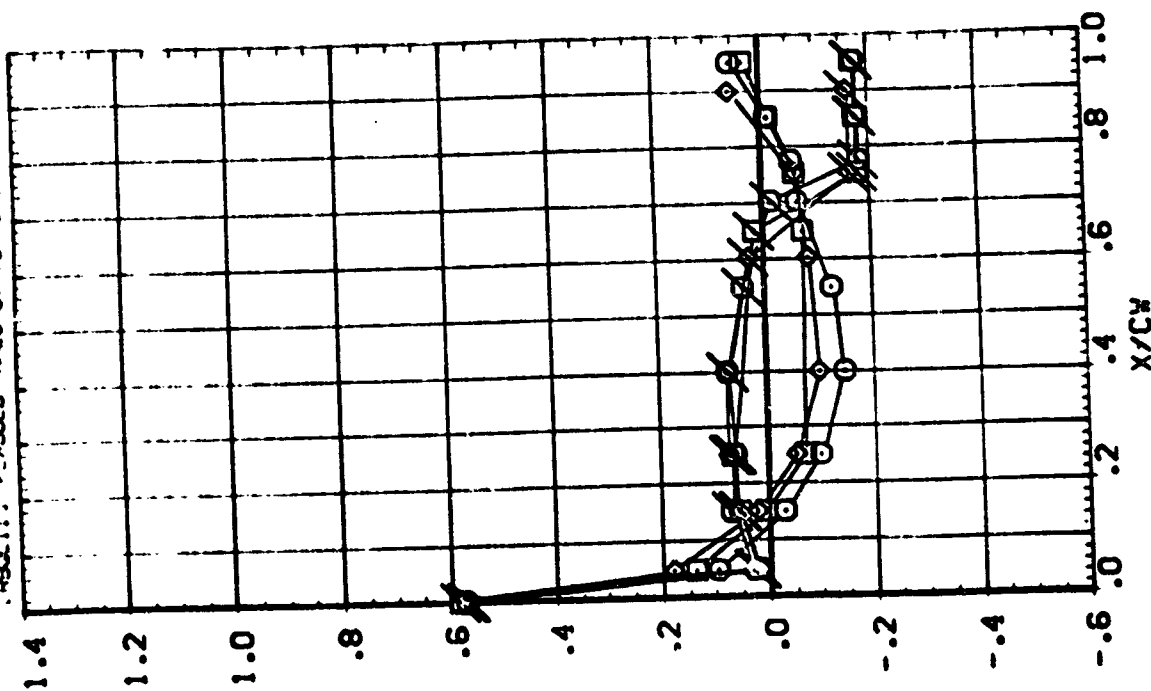
UPPER WING
LOWER WING



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

UPPER WING
LOWER WING

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 REG-111 OPEN ASES 87-707 CA12 C2A
 REG-111 FLAGGED ASES 87-707 CA12 C2A



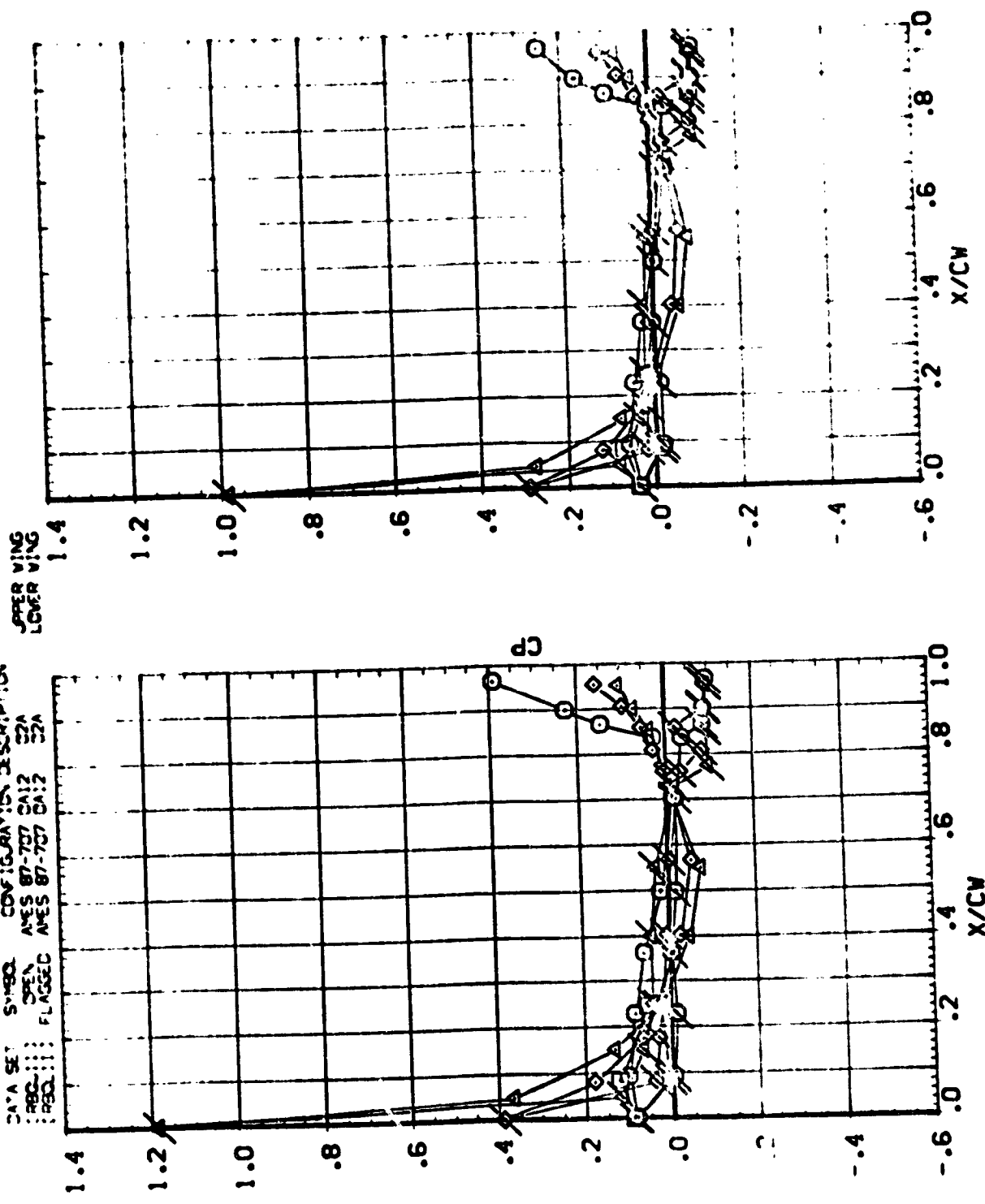
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

ELEVATION
 20.000
 40.000

H/L
 3.502

1.799
 .364
 .427
 .234

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 :REC: : OPEN AMES 87-707 DA:2 22A
 :REC: : FLAGGED AMES 87-707 DA:2 22A

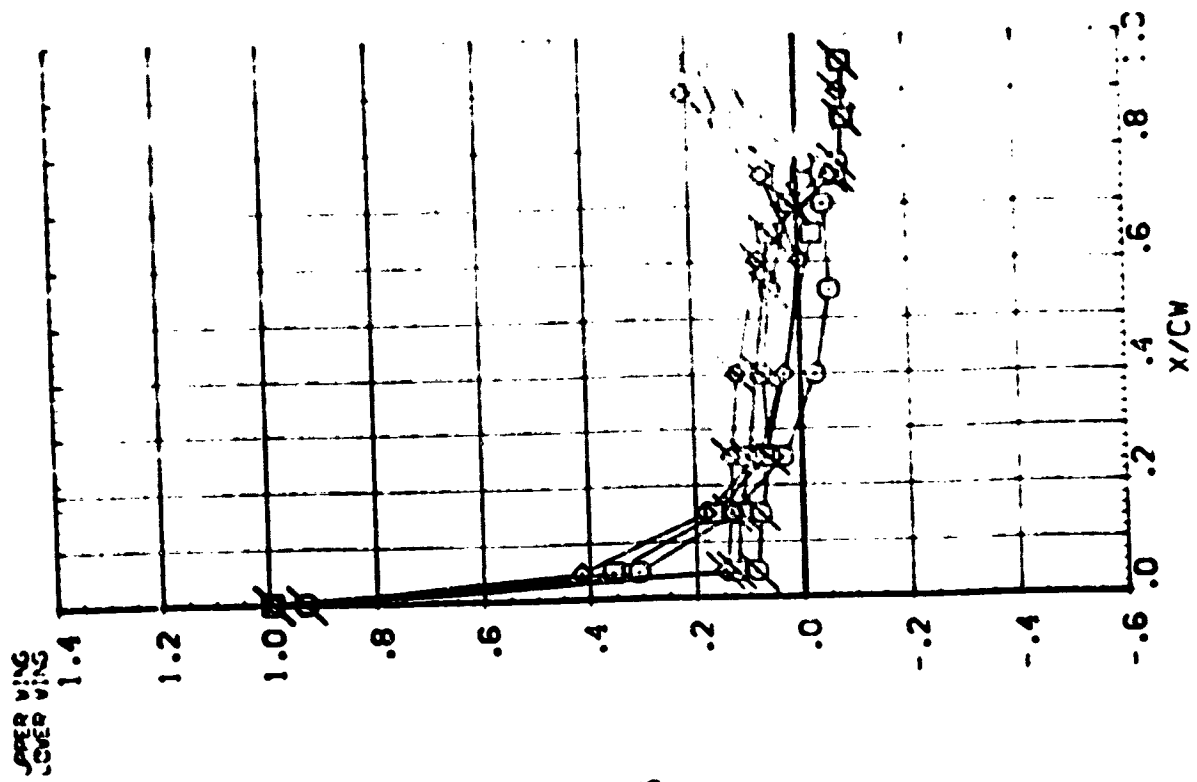
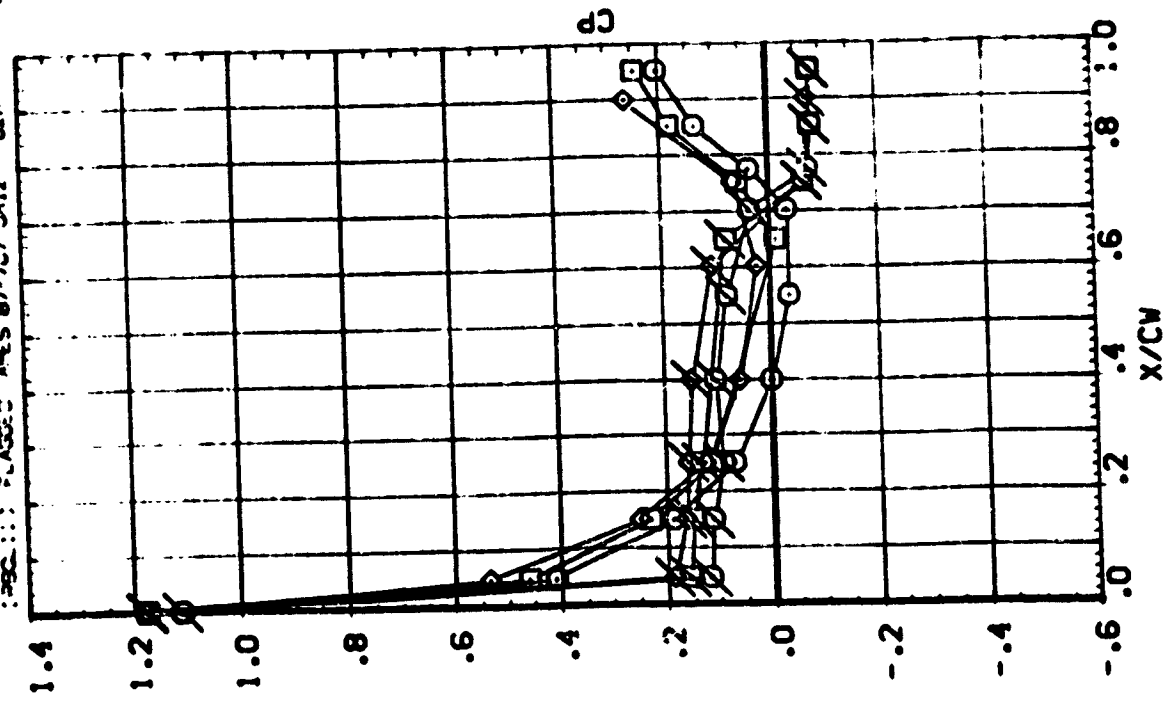


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

A.04A .000 9.231.9
 2.110 2.500 9.231.9
 42.000

S.000
 0.673
 0.780
 0.887
 3.502
 3.502
 3.502

DATA SET: SYMBOL CONFIGURATION DESCRIPTION
 880-111 OPEN AXES 87-707 DA12 52A
 880-111 PLACED AXES 87-707 DA12 52A

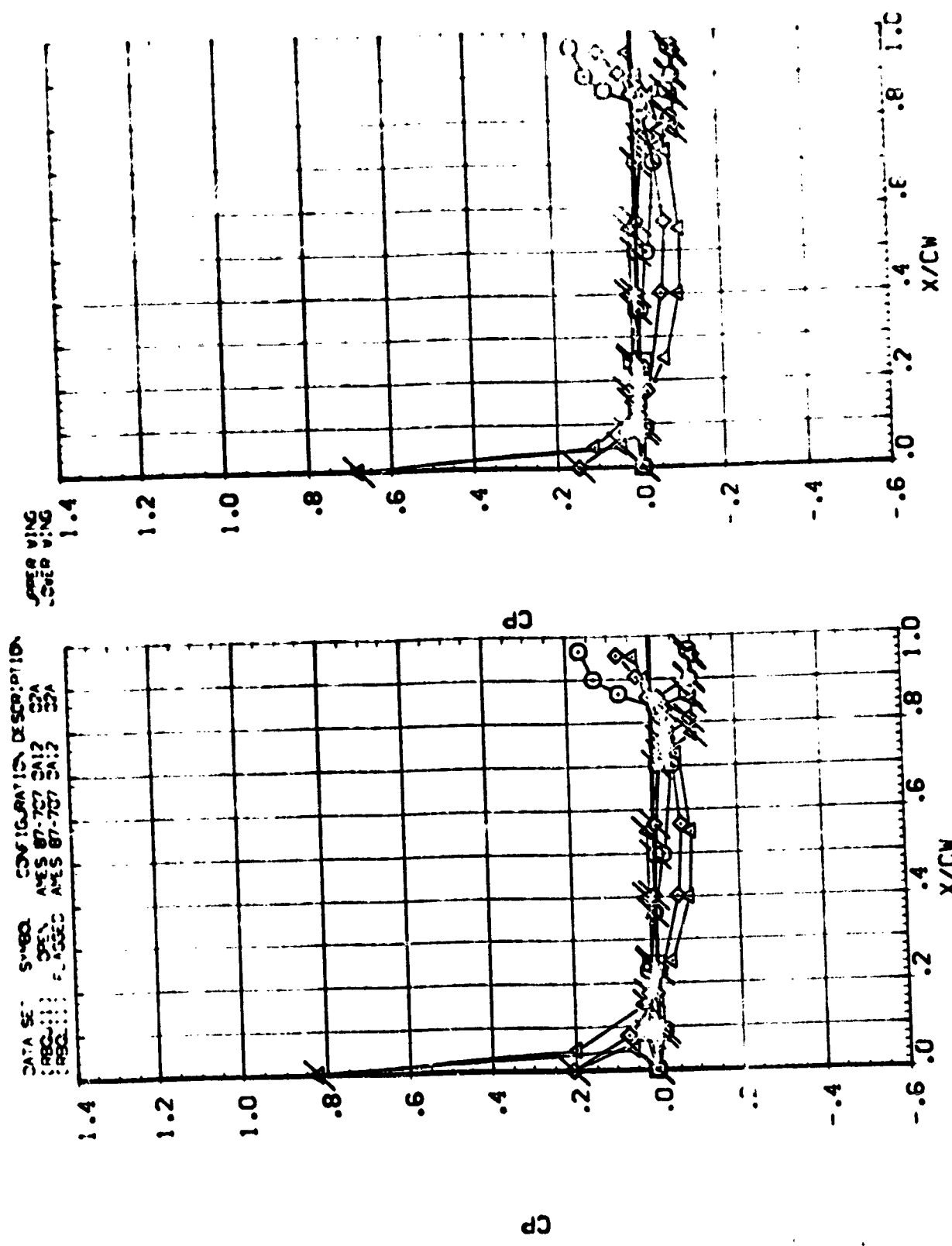


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

DAG

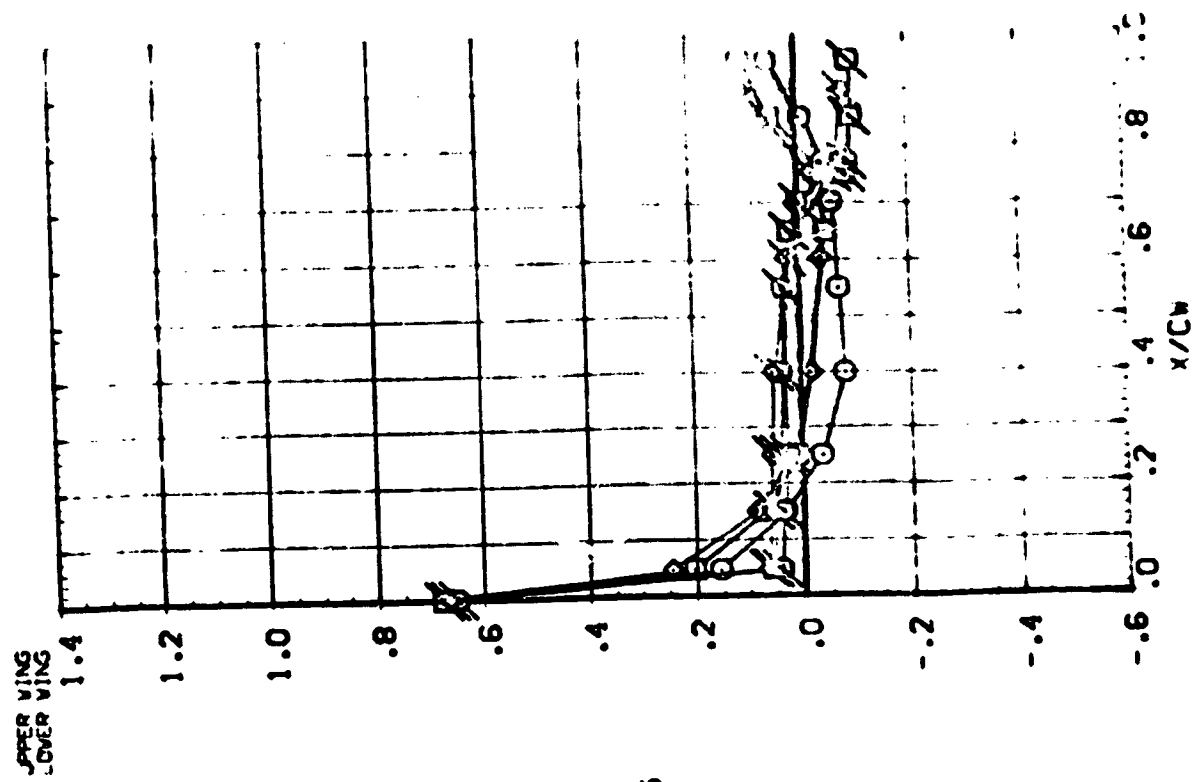
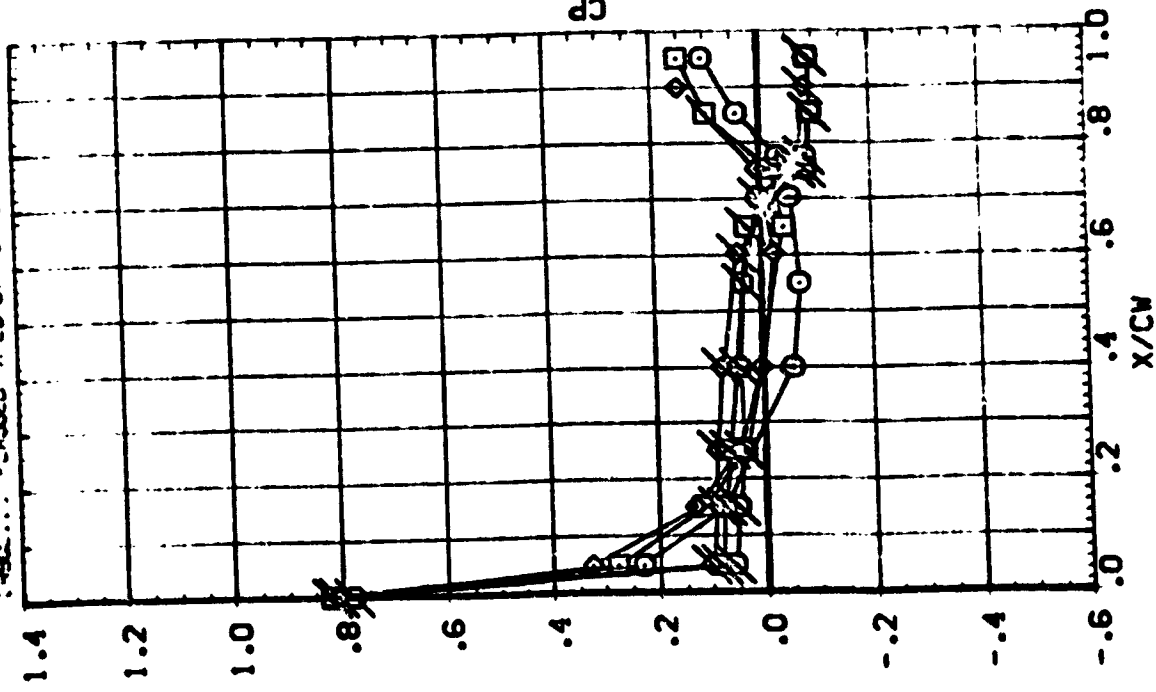
1.000 2.223
 1.000 2.223
 1.000 2.223

SYBC 1.000
 V/BV .799
 BE'A .150
 W/C 3.507
 .364
 .427
 .534



1.111
1.08

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 :PBC:11 OPEN ASES 87-707 CA12 C2A
 :PBC:12 ASSEC ASES 87-707 CA12 C2A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

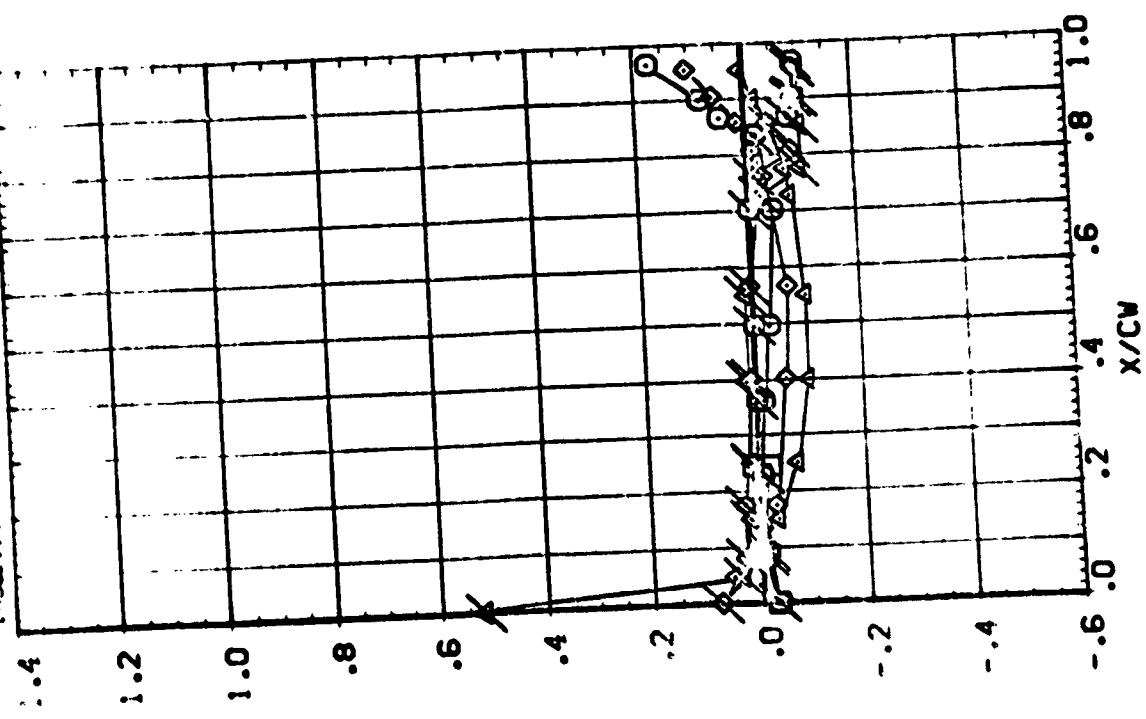
PARAMETER: 1.1.1.1
 1.000 2.000 3.000
 40.000
 ALPHA
 ELEV

DATA 52
 6.530 3.502

SYMBOL
 799
 1364
 1477
 1534

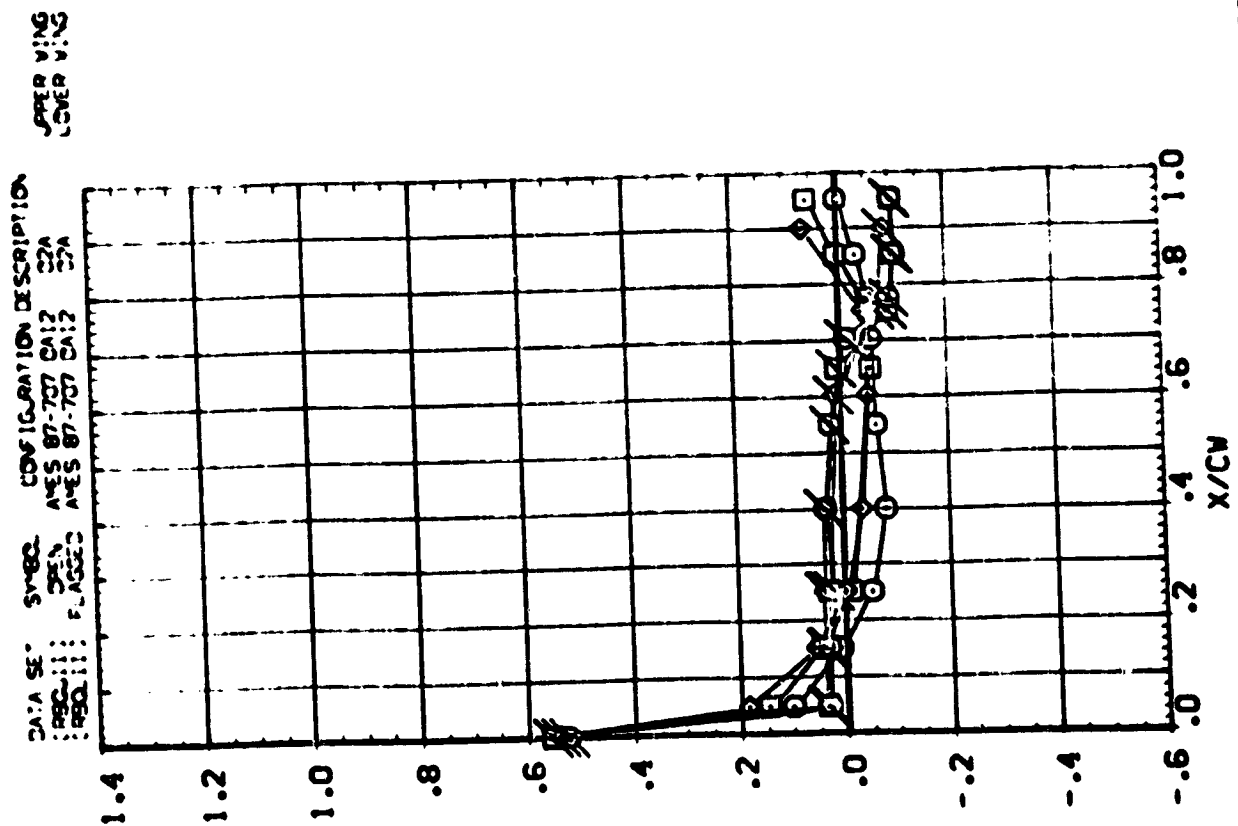
UPPER WING
 LOWER WING

CONFIGURATION DESCRIPTION
 ANES 87-707 DA12 02A
 ANES 87-707 DA12 02A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

DATE	TIME	WIND	WAVE	SEA	WIND	WAVE	SEA
15-08-54	13/30	0.673	0.780	0.08	0.530	3.500	0.00



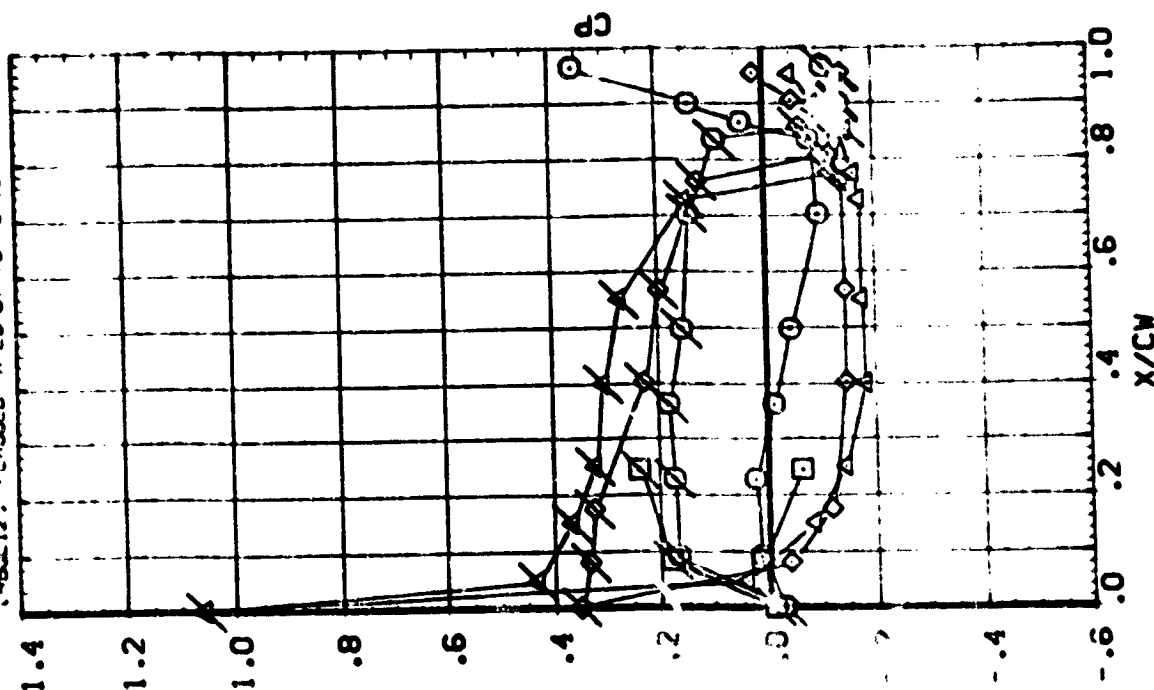
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

STY 110.0

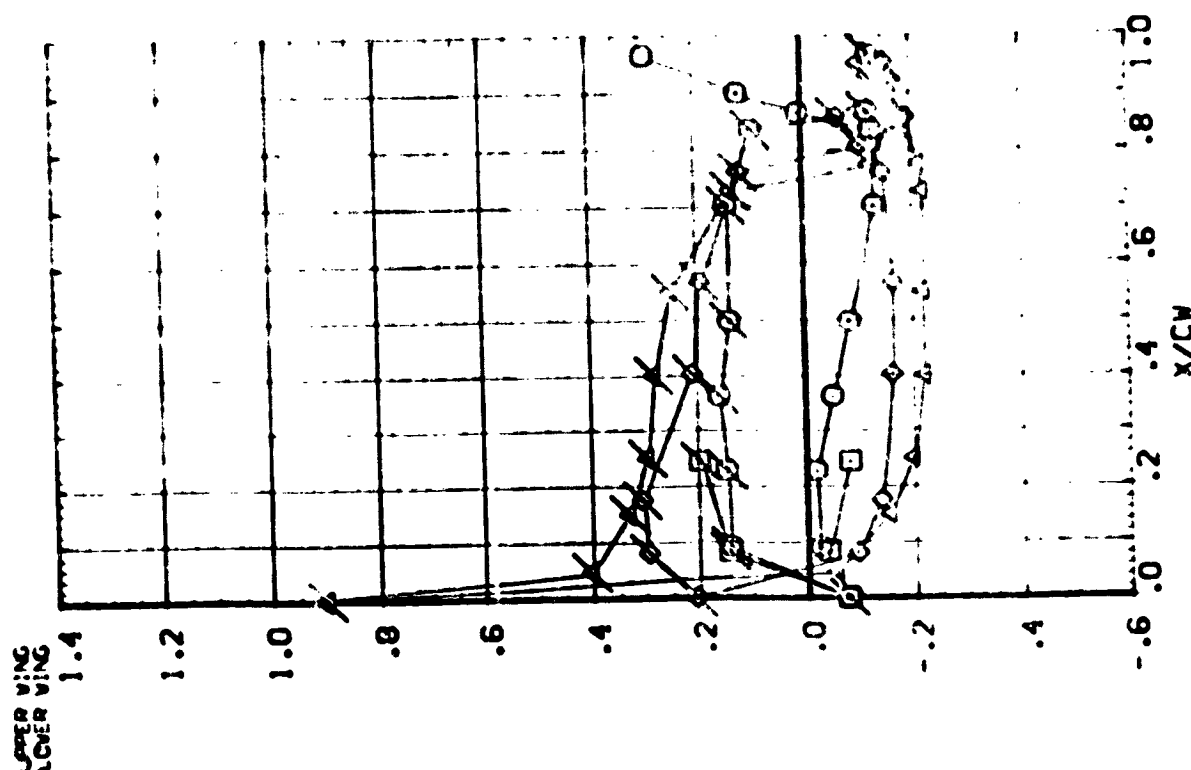
5.00C	1.00B	BE'A	WAC
1	.789	-6.53C	7.19B
2	.364	-3.34C	
3	.477		
4	.534		

BE TA	WAC
-6.53C	7.49B
-3.34C	

DATA SET:	SYMBOL	CONV:GCRAT:CN	DESCRIPTION
0000000121	OPEN	AVE'S 87-737	CA:12
0000000122	AVE'S	AVE'S 87-737	CA:12



CP

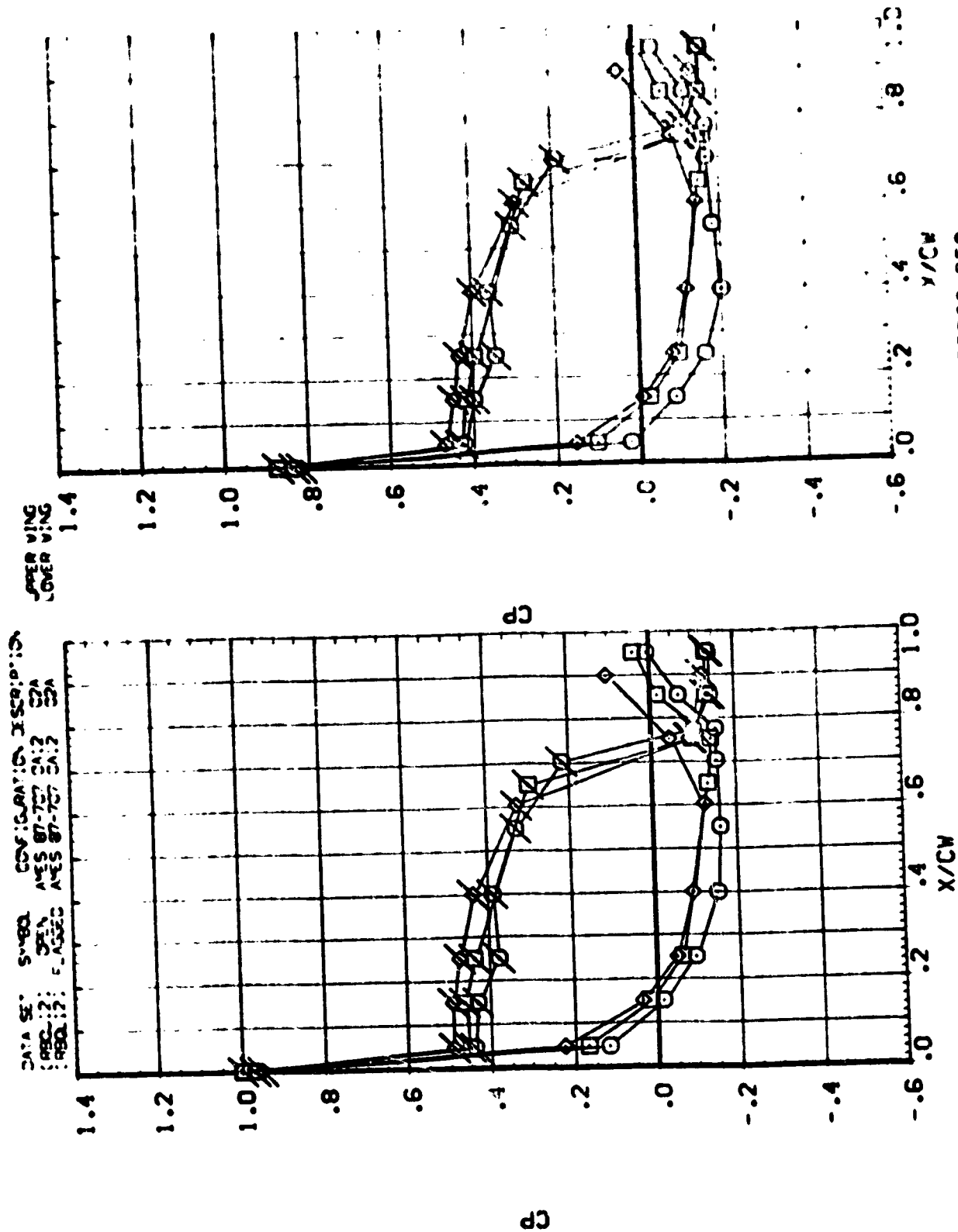


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

30

5.1	2.198
6.530	
3.342	

SECRET
JAN 10 1954
U.S. AIR FORCE
OFFICE OF THE
JOINT CHIEFS OF STAFF
WASHINGTON, D.C.



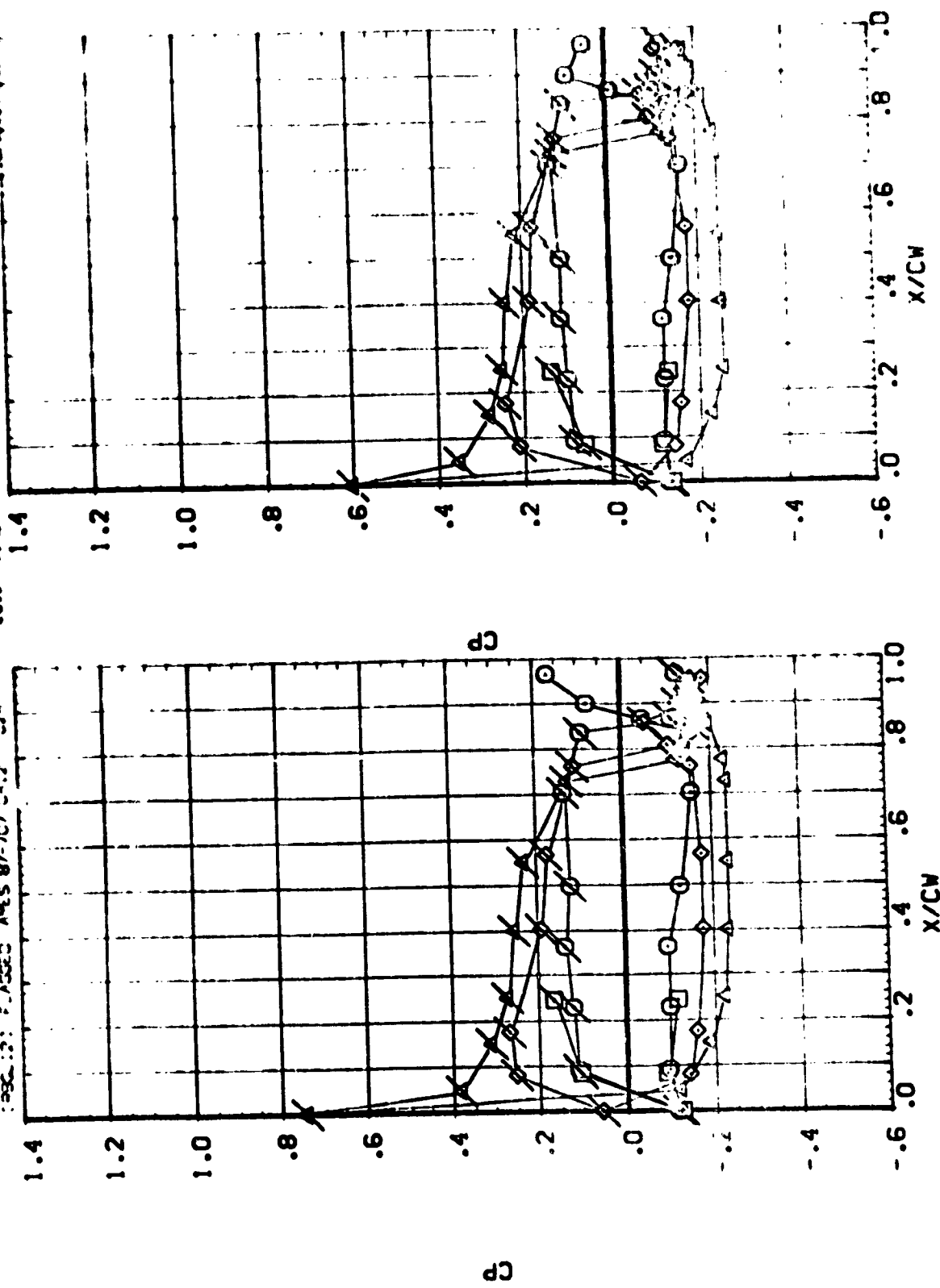
CHRONICISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

ALPH
 ELEV
 2.000
 2.000
 2.000
 2.000
 2.000
 2.000

3.70
 3.20
 2.498

1.29
 1.36
 1.47
 1.34

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 00000000 OPEN ARES 87-707 2A12 22A
 00000000 FLASSED ARES 87-707 2A12 22A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

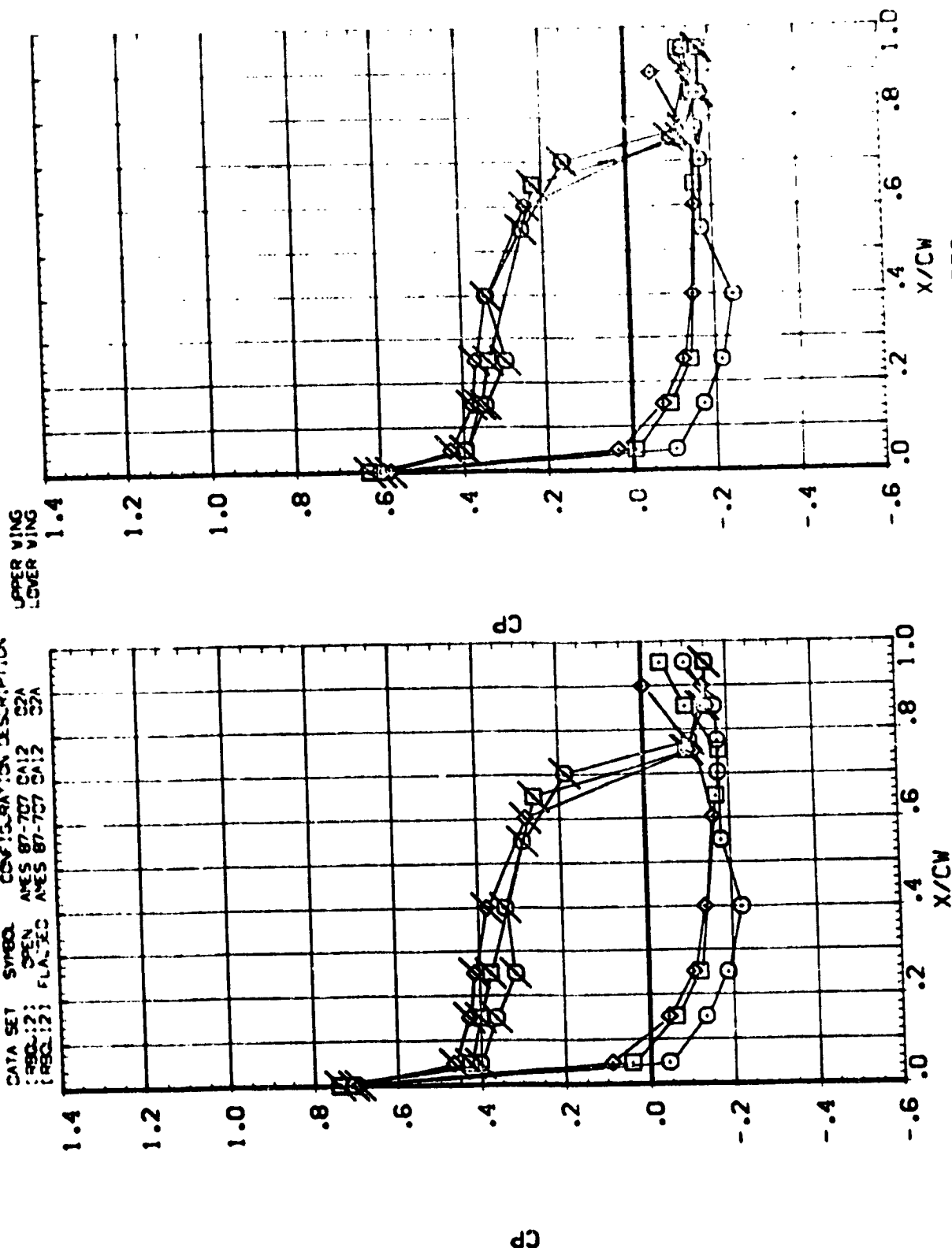
ST-4: J.E. Jurek

SVBC	V/BN	BETA	WASH
Q	.673	-.17C	2.498
	.78C	3.57C	

3.07C
- .17C
V. 38
MAY 2 1968

Symbol	V/VB
○	.673
□	.78C
◇	.887

DATA SET	SYMBOL	CONFIDENCE	DESCRIPTION
PROG: 2	OPEN	AVES 87-707	CA 12 32A
PROG: 2	FLA-EC	AVES 87-707	CA 12 32A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

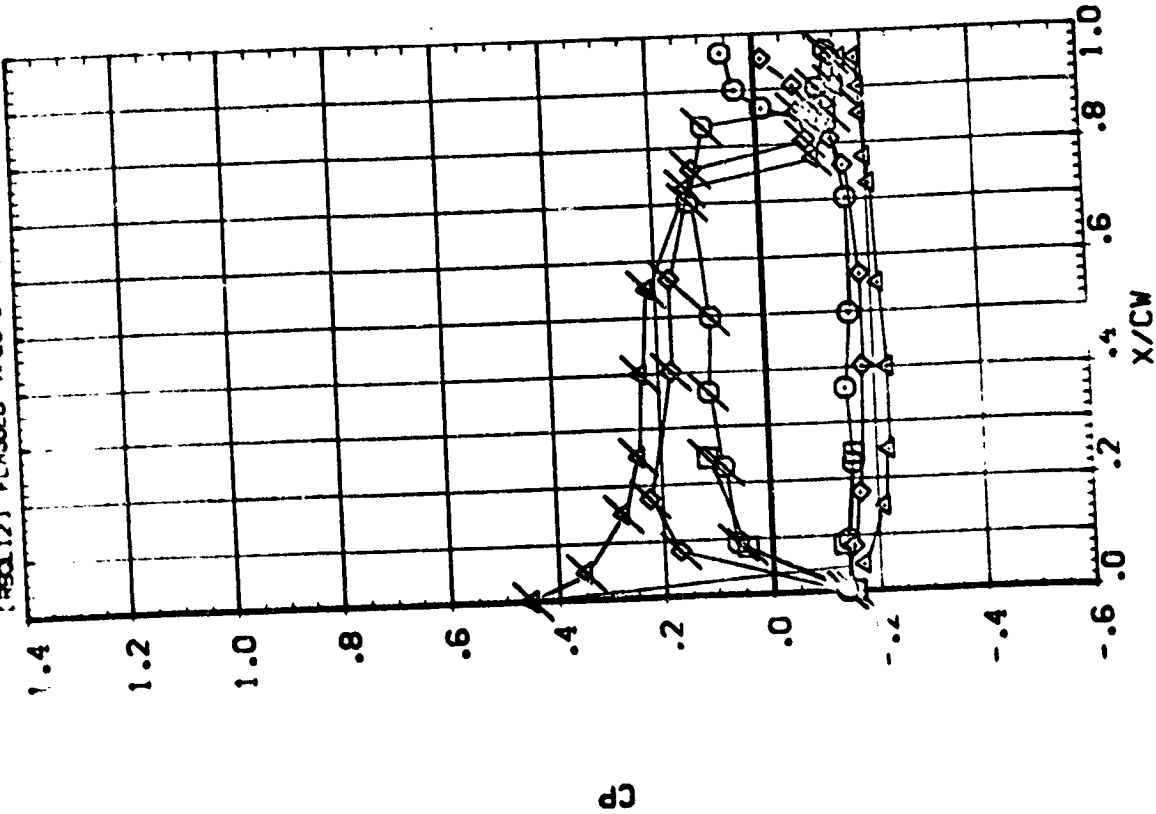
7:12
45 Ave

PARAMETRIC VALUES
 ALPHA 10.000
 ELEVON -70.000
 RUDLR 2.000
 RUDLR 40.000

SYMBOL 1/BN BETA MACH
 .799 6.200 2.498
 .364
 .427
 .534

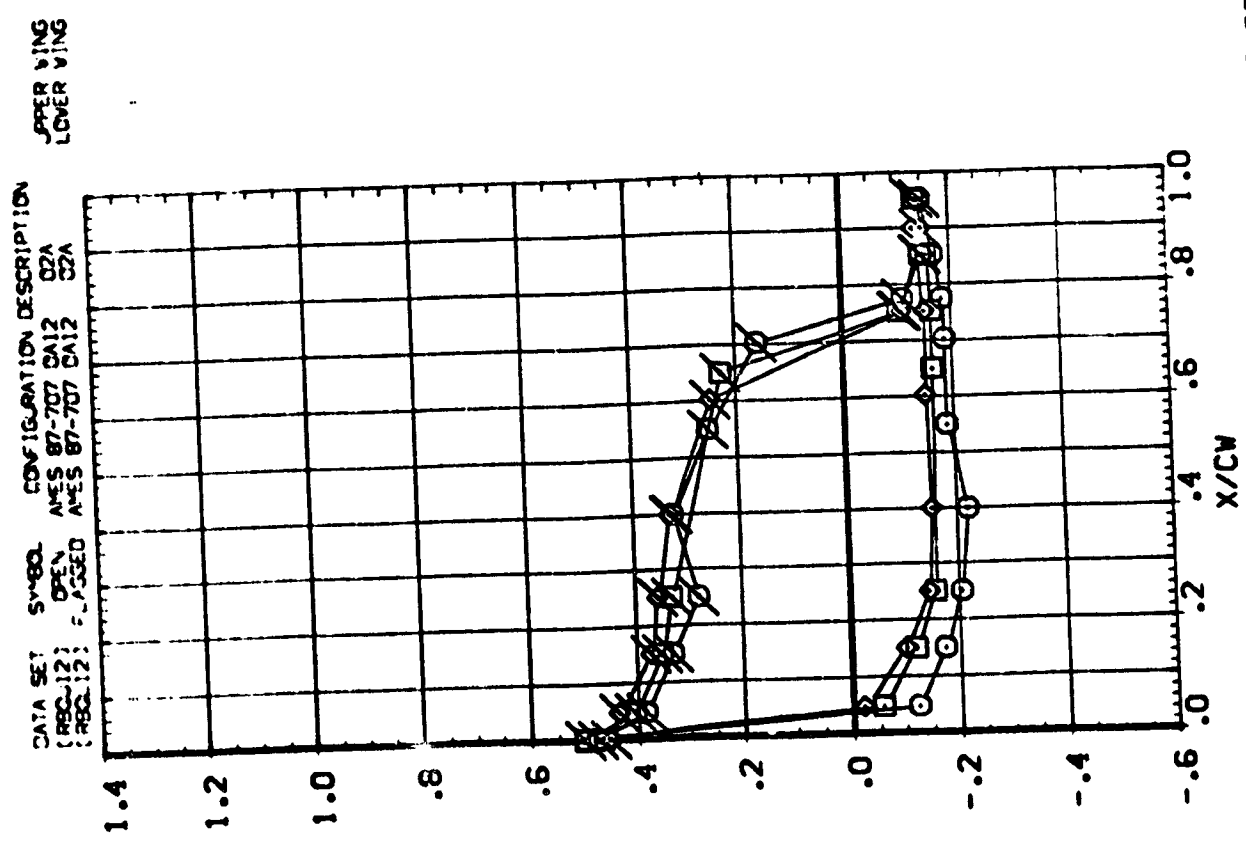
UPPER WING
 LOWER WING

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 RBQ 121 OPEN AMES 87-707 CA12 32A
 RBQ 121 FLAGGED AMES 87-707 CA12 32A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

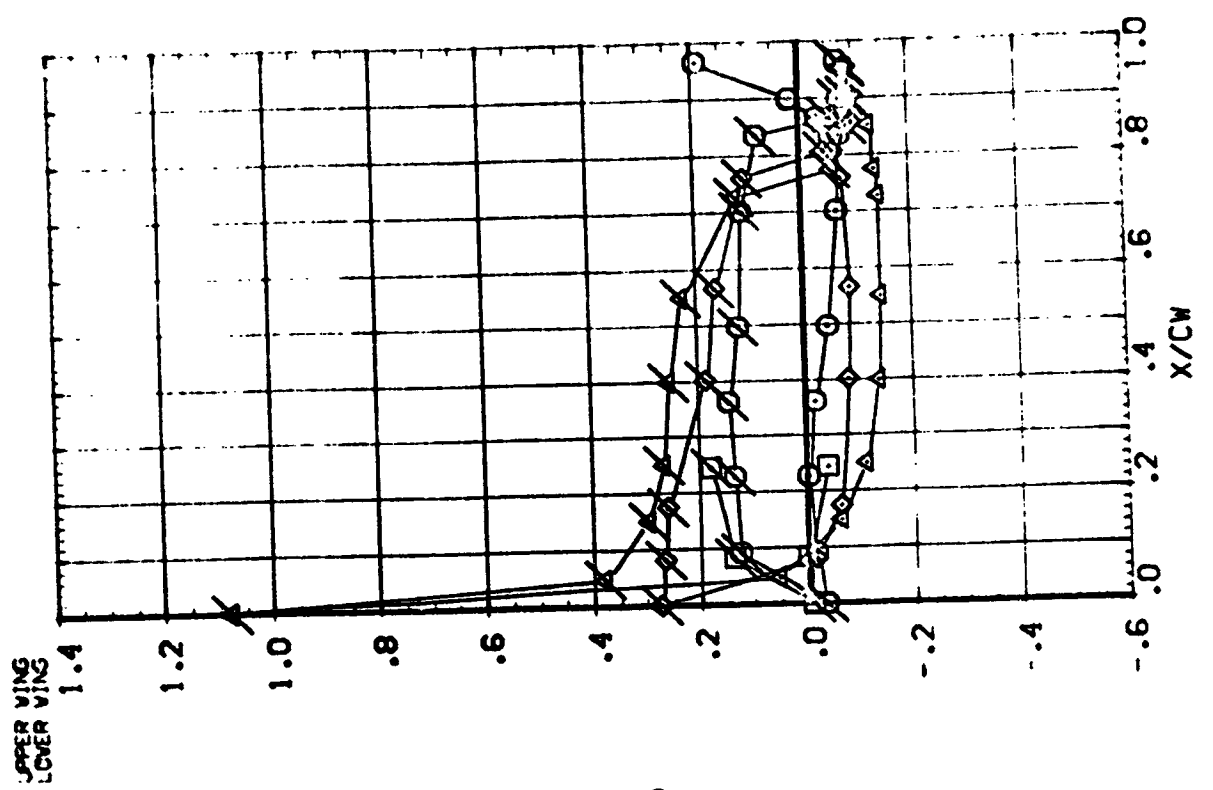
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES



10.111
 ELEVON -20.000 2.051.2 43.000

J 111
 .299
 .364
 .427
 .534
 3.502

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [R80:12] OPEN APES 87-707 CA:2 C2A
 [R80:12] FLAGGED APES 87-707 CA:2 C2A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

ALPHA
ELEVON

10.000
20.000
30.000
40.000

ALPHA
ELEVON

10.000
20.000
30.000
40.000

ALPHA
ELEVON

10.000
20.000
30.000
40.000

ALPHA
ELEVON

10.000
20.000
30.000
40.000

ALPHA
ELEVON

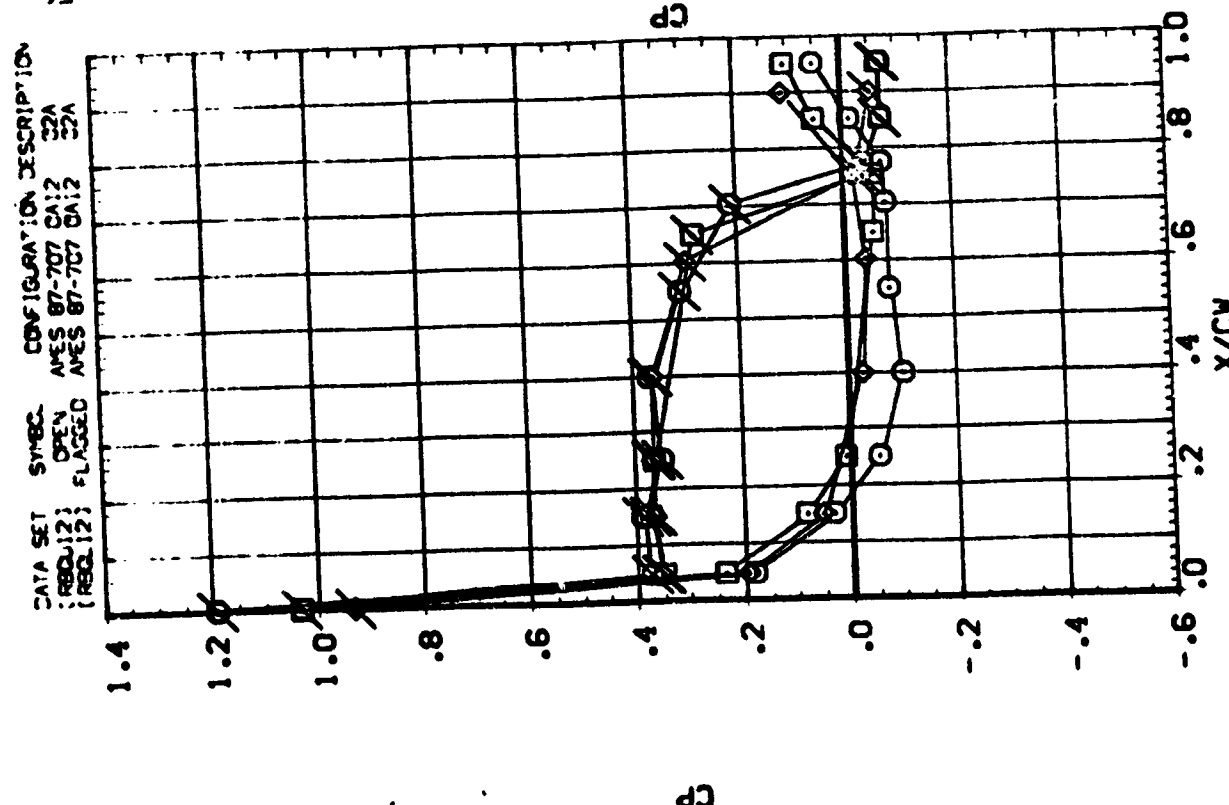
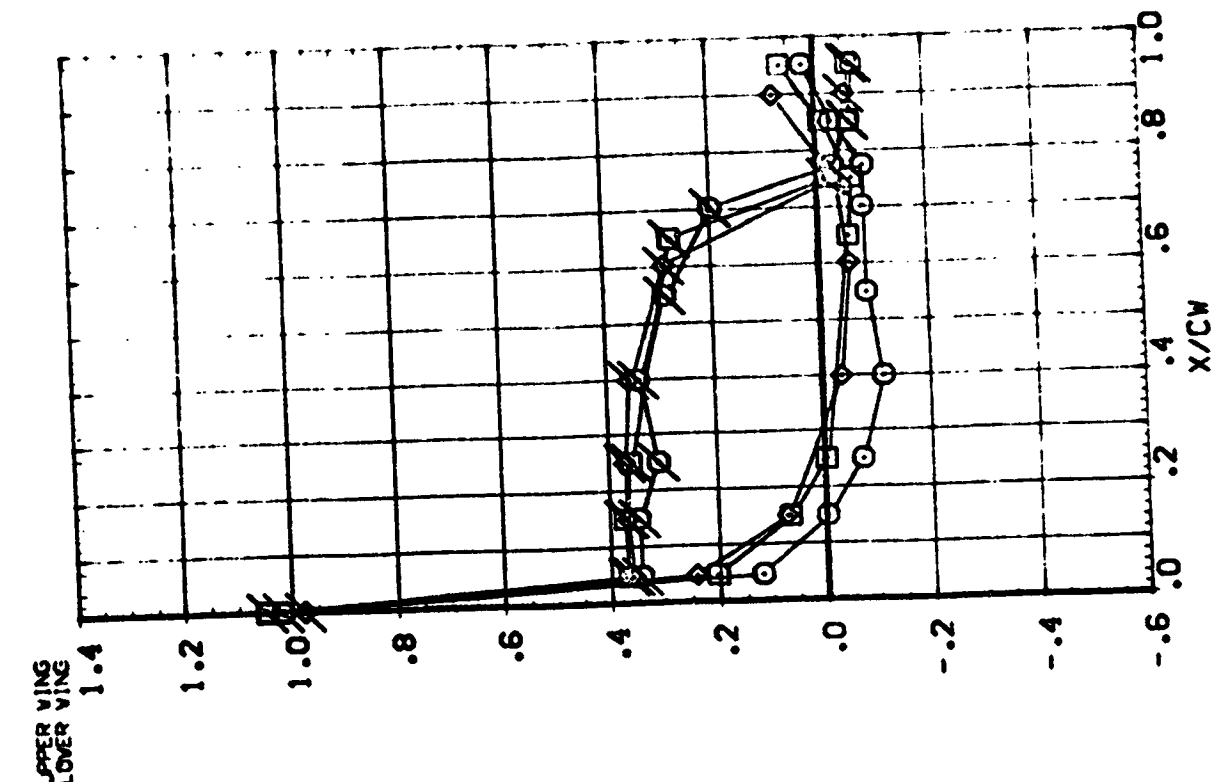
10.000
20.000
30.000
40.000

ALPHA
ELEVON

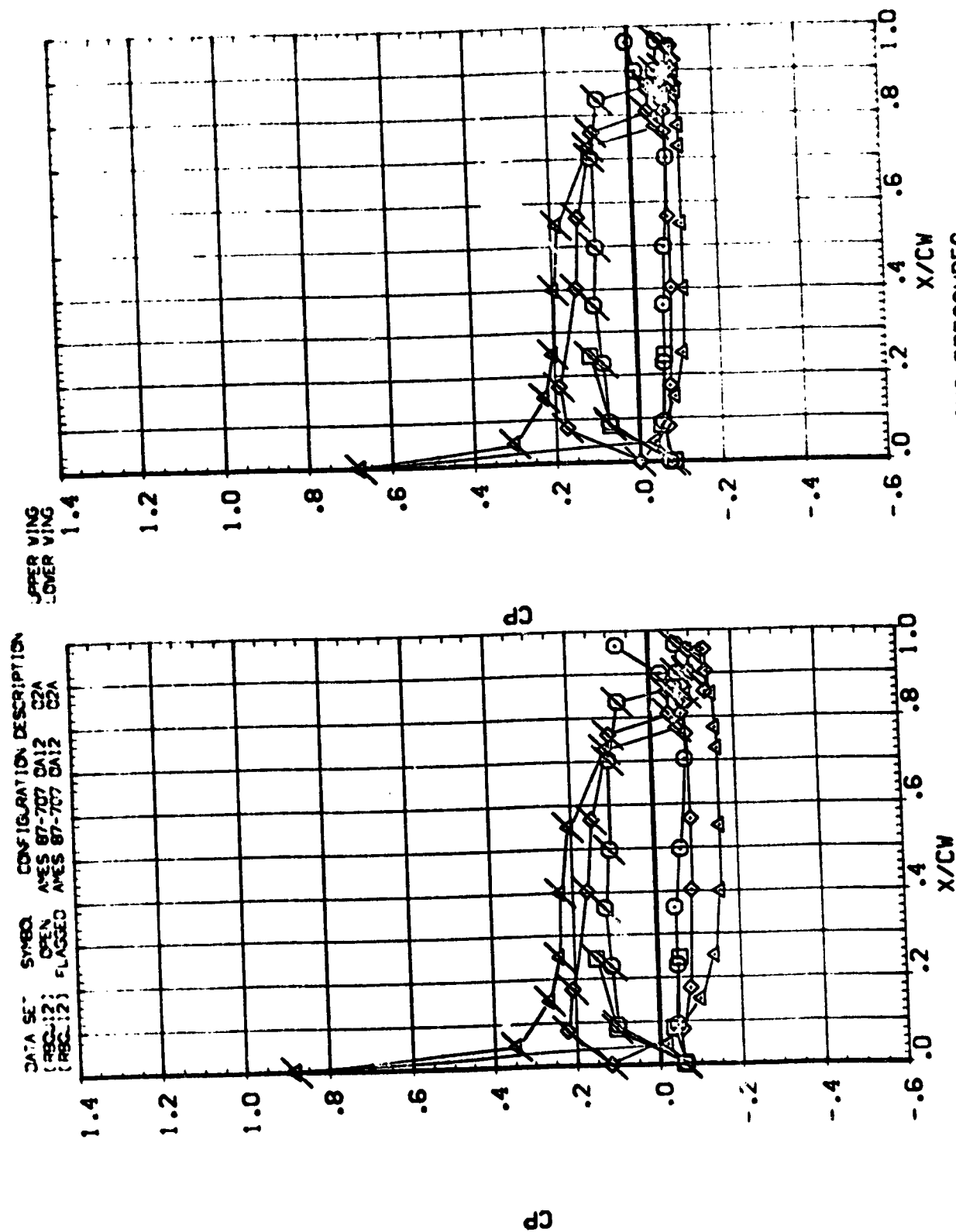
10.000
20.000
30.000
40.000

ALPHA
ELEVON

10.000
20.000
30.000
40.000



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

[illegible]

CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

ALPHA
ELEVON

MAE

BETA

V/B

SYMC

10.000

2.05-2

-20.000

40.000

10.000

2.05-2

-20.000

40.000

10.000

2.05-2

-20.000

40.000

10.000

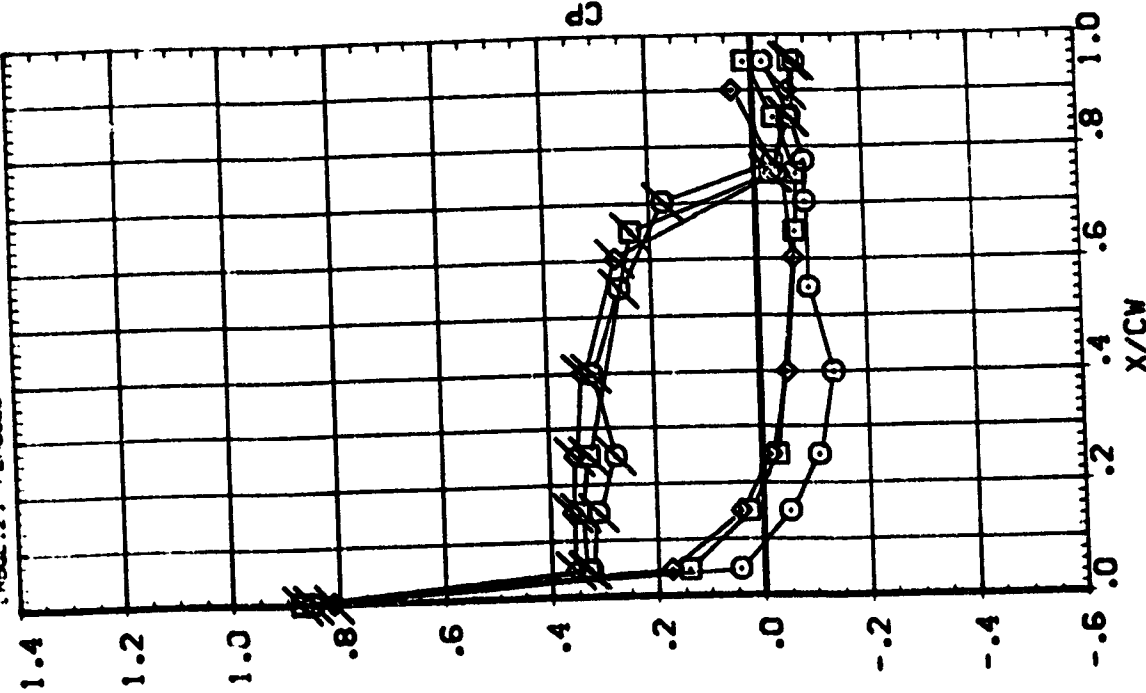
2.05-2

-20.000

40.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION

REG12 OPEN AVES 87-707 DA12 C2A
REG12 FLAGGED AVES 87-707 DA12 C2A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

SYMBOL

Y/3N

BETA

MACH

6.43C 3.502

.299
.364
.427
.534

PARAMETRIC VALUES

10.00C

R/OOER

.00C

ALPHA

R/OOER

.00C

ELEVON

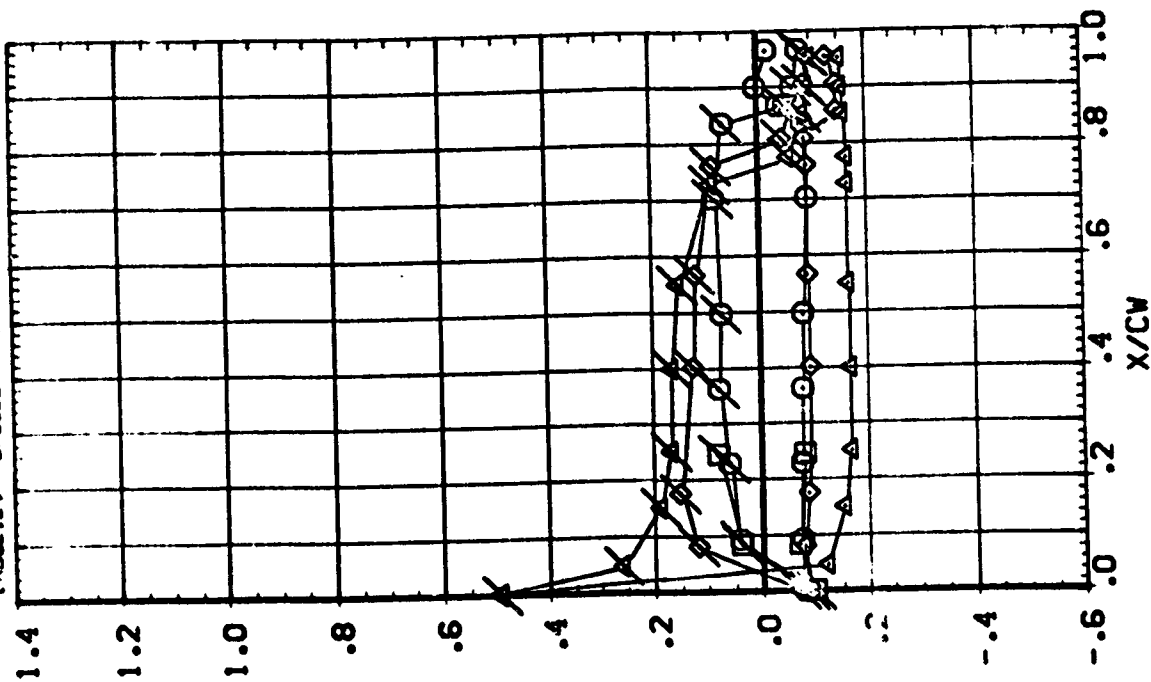
R/OOER

40.00C

DATA SET SYMBOL CONFIGURATION DESCRIPTION

[REQ.12] OPEN ANES 87-707 DA12 OZA

[REQ.12] FLAGGED ANES 87-707 DA12 OZA

UPPER WING
LOWER WING

CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

ALPHA 10.000
ELEVON -20.000

RJ00LR
RJ01LR

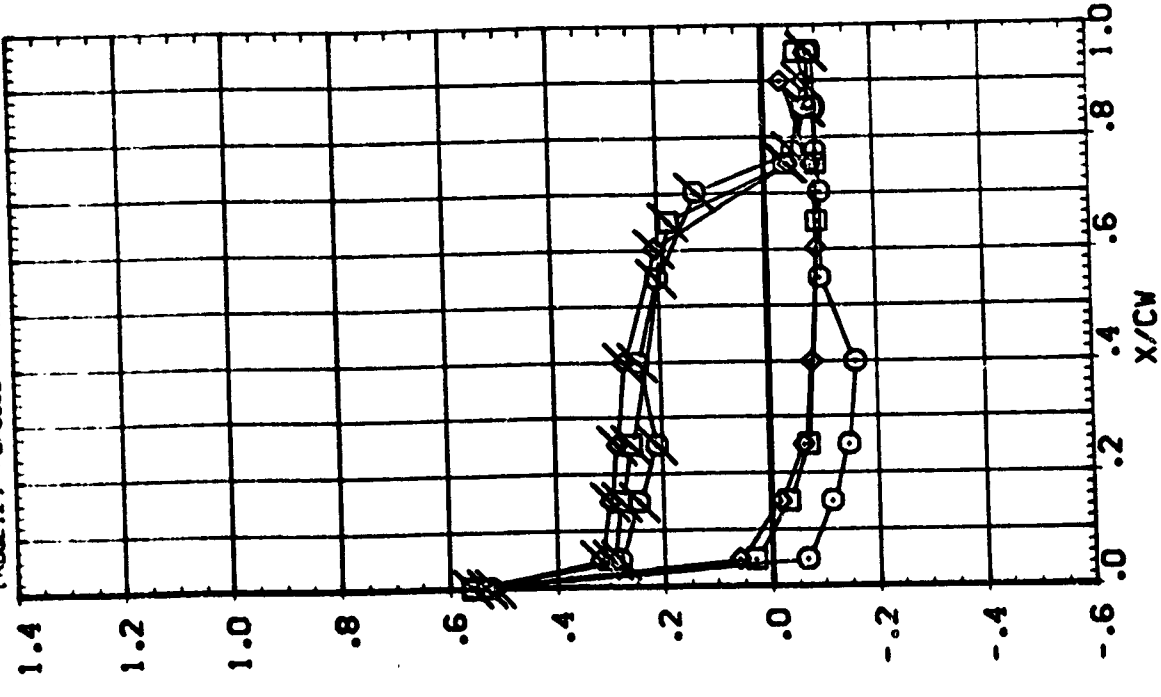
.000
40.000

BETA 6.430
MACH 3.502

SYMBOL Y/BN
○ .673
□ .780
◇ .887

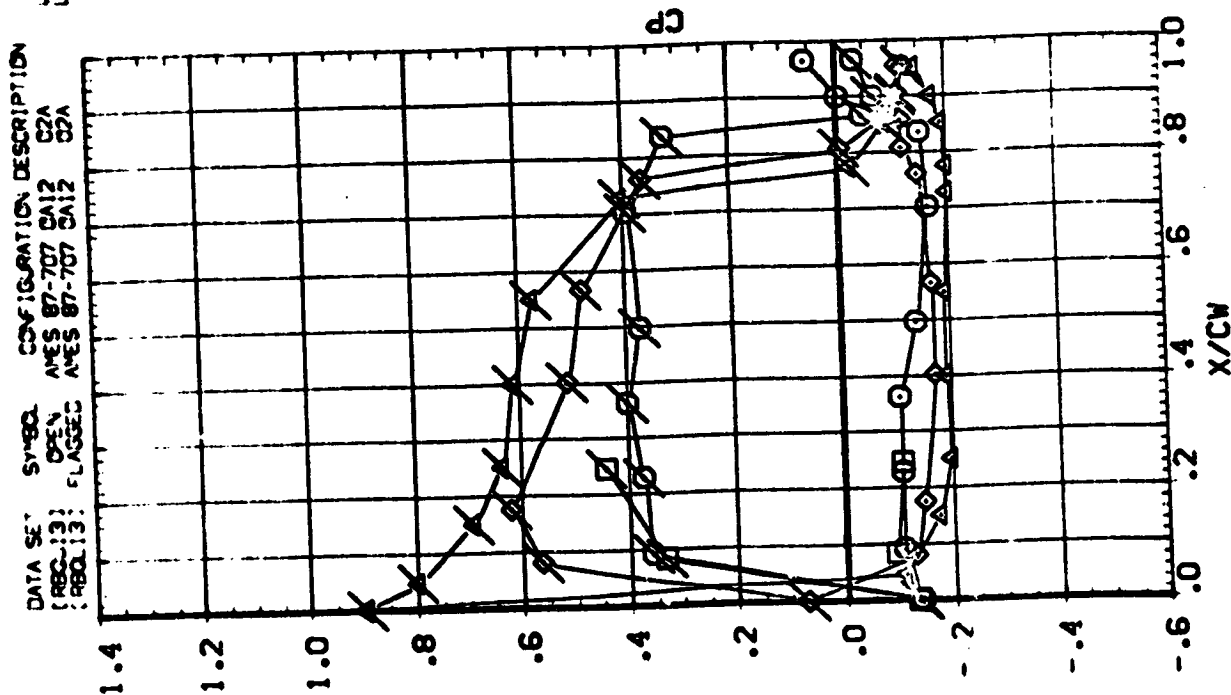
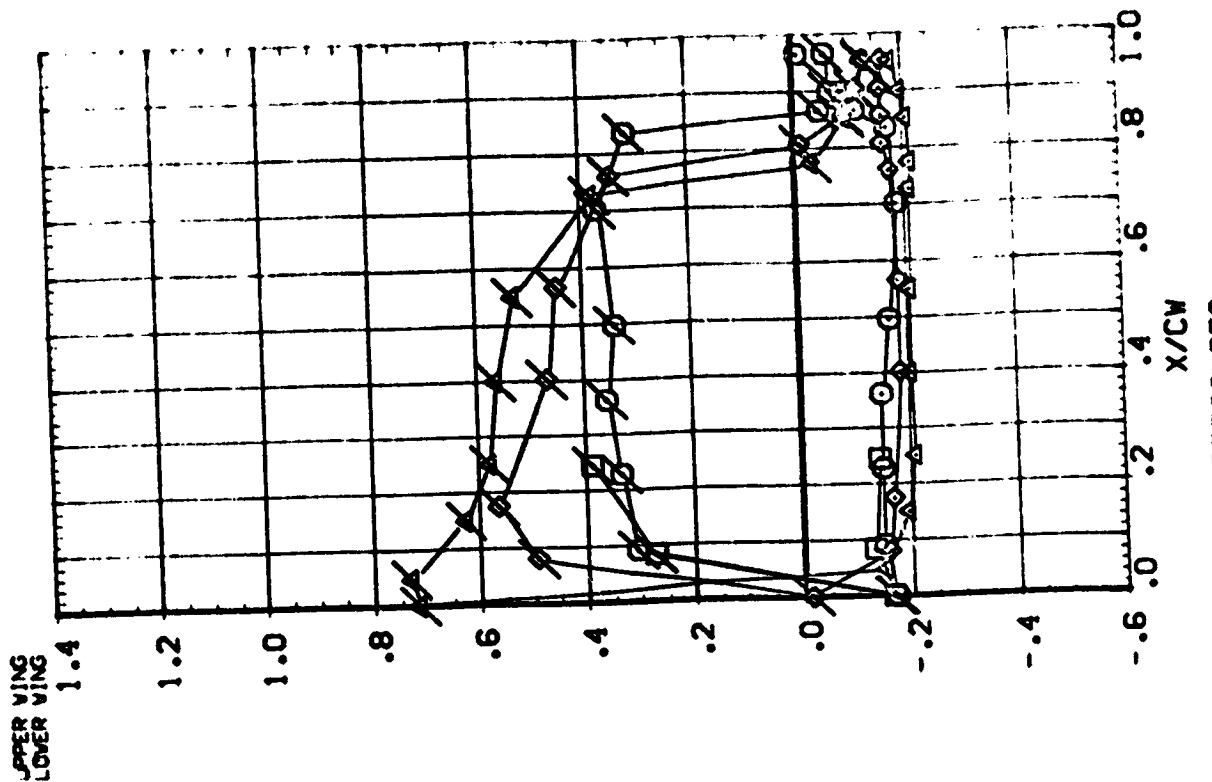
UPPER WING
LOWER WING

DATA SET SYMBOL CONFIGURATION DESCRIPTION
[REQ.12] OPEN AYES 87-707 DA12 C2A
[REQ.12] FLANGED AYES 87-707 DA12 C2A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA 20.000 RUDLR 40.000
 ELEVON -20.000 RUDLR 40.000



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REQ-13) OPEN ANES 87-707 CA12 C2A
 (REQ-13) FLAGGED ANES 87-707 CA12 C2A

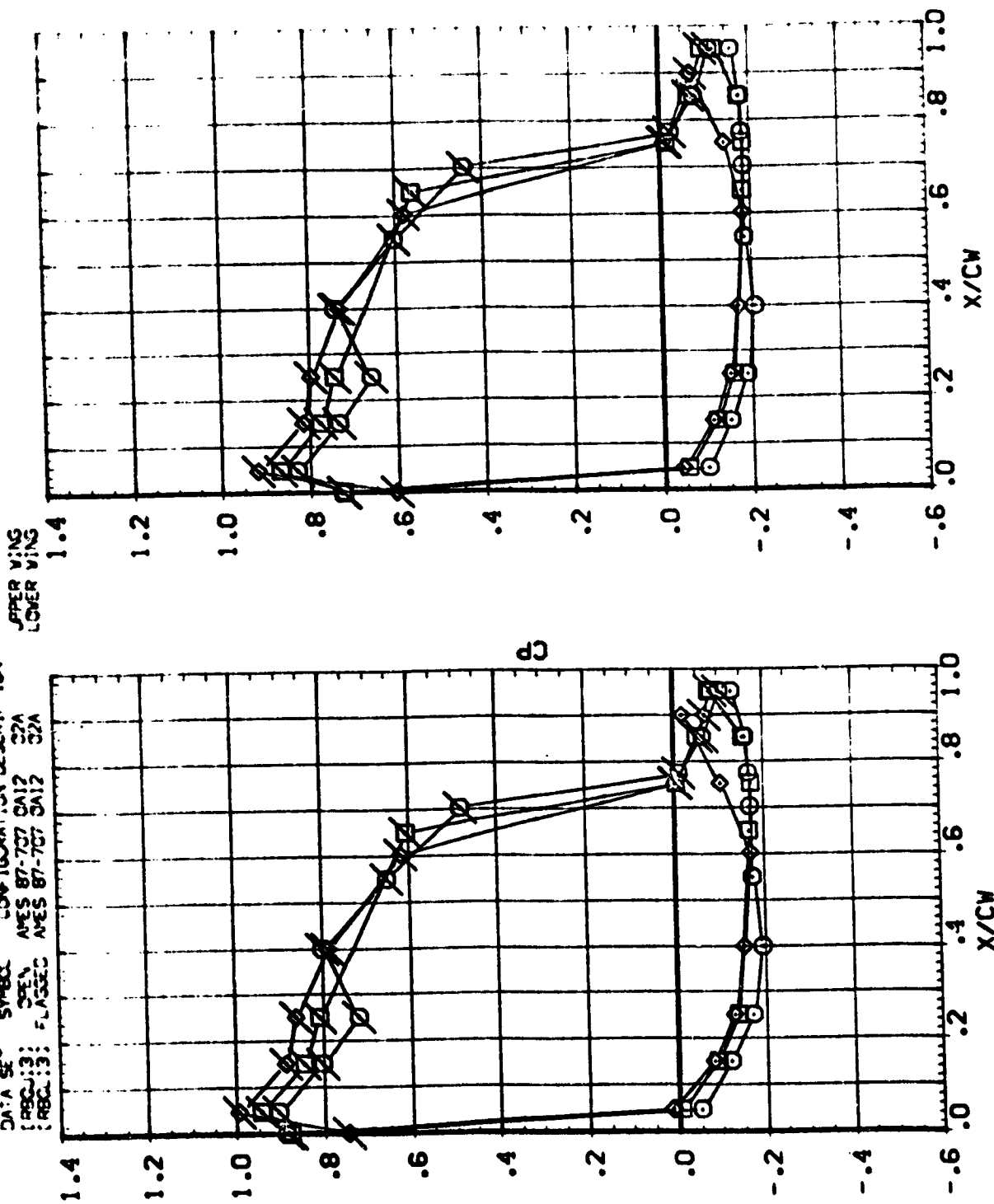
SYMBOL V/B BETA VAC
 .299 -6.490 2.498
 .364 -3.330
 .427
 .534

CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

A. 1.4
 E. 1.4
 70.000
 45.000

5.484
 0.673
 0.780
 0.887
 0.1
 0.490
 2.498

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RBC) 3 OPEN AVES 87-707 DA12 32A
 (RBC) 3 FLASSEC AVES 87-707 DA12 32A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

SYMBOL
()
()
()
()

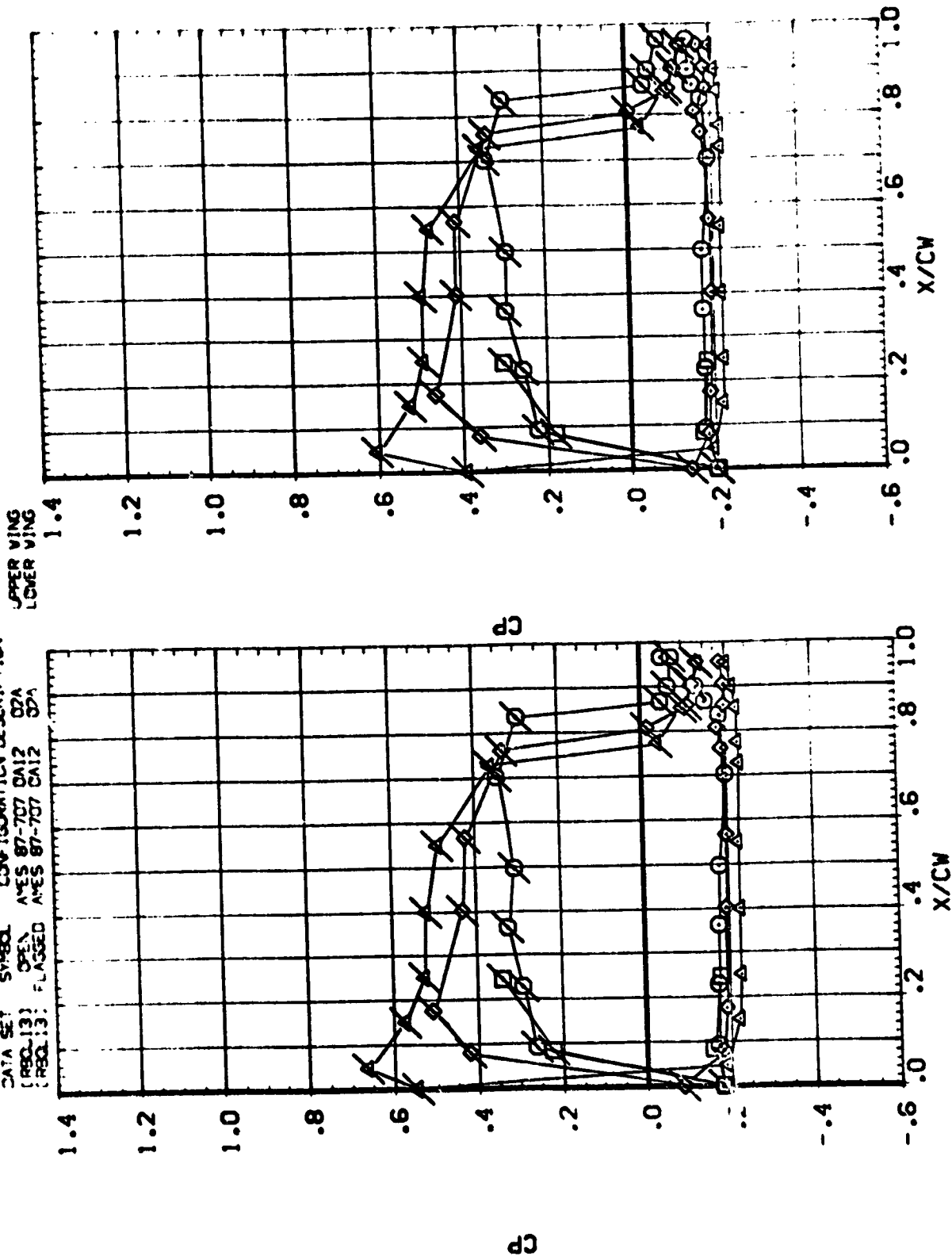
V/BV .299
.364
.427
.534

BE TA .160
3.240

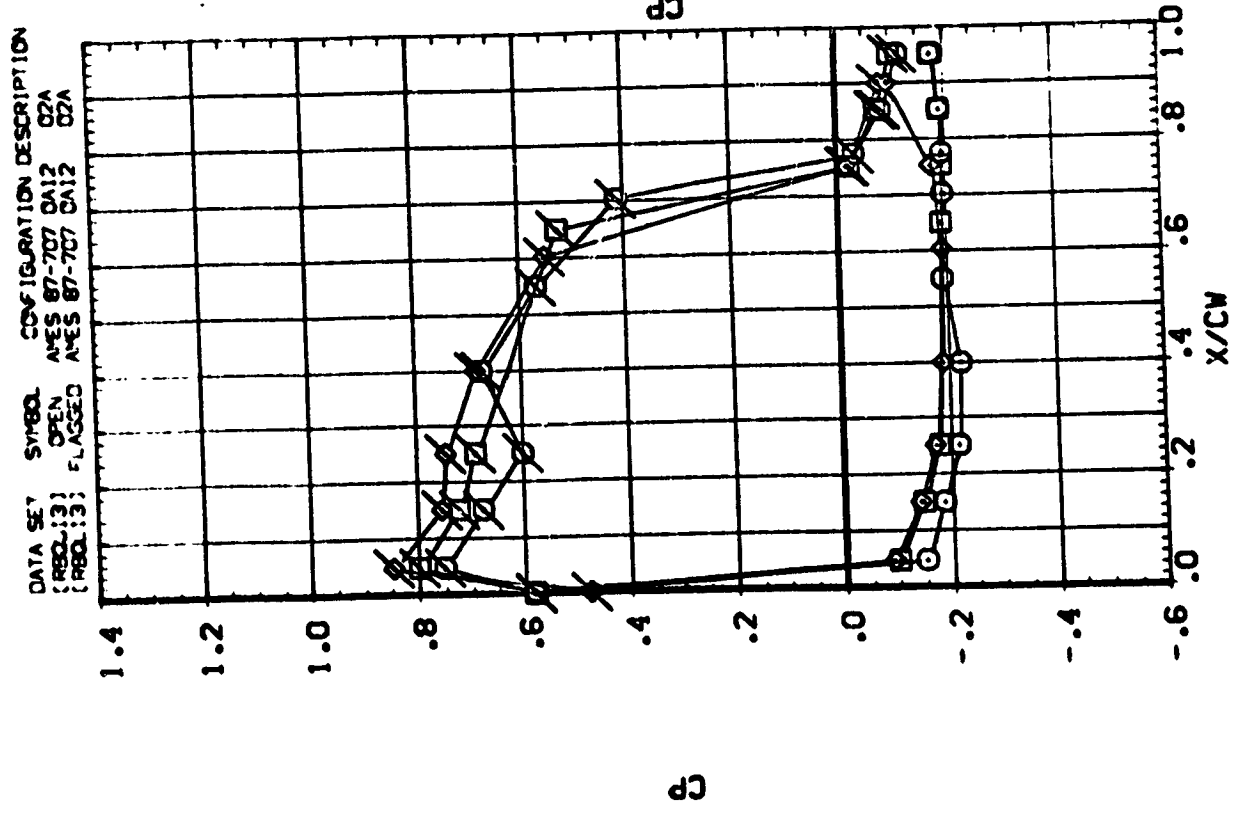
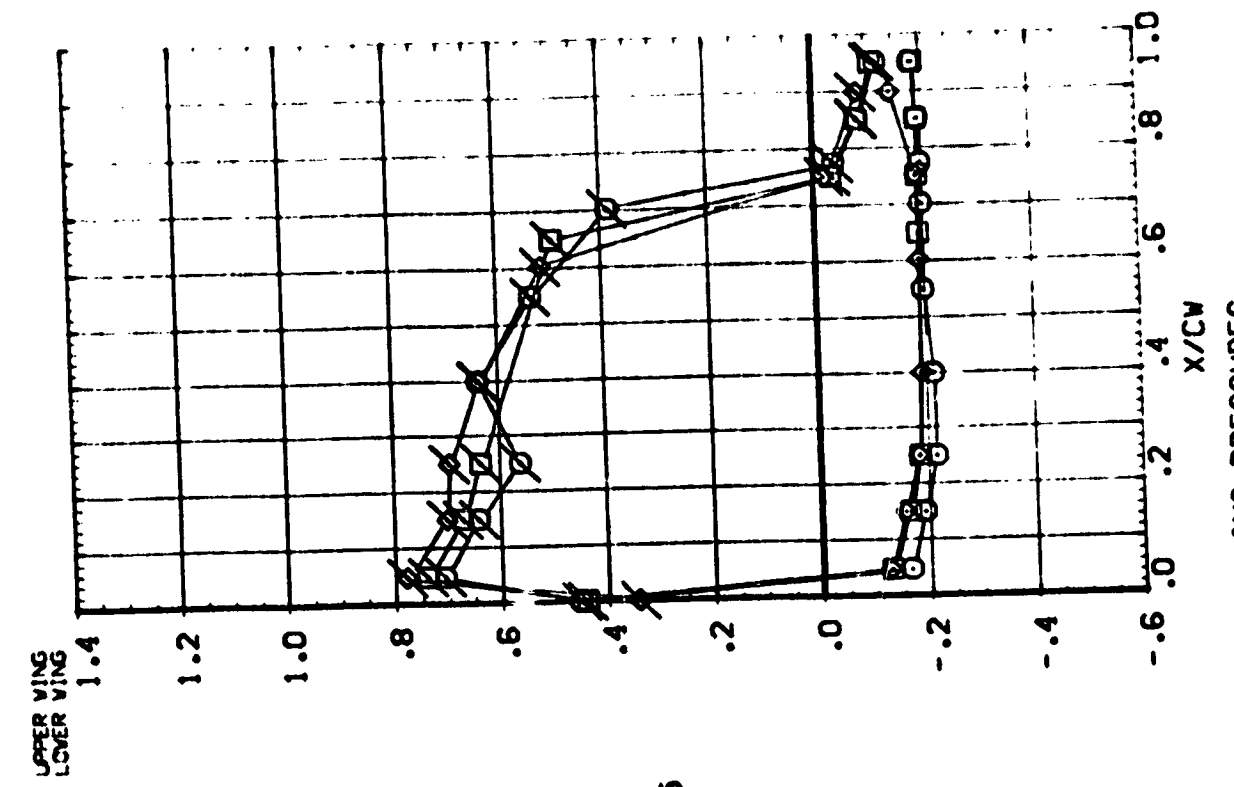
MACH 2.498

PARAMETRIC VALUES
ALPHA 20.000 R.D. 2
ELEVON -20.000 R.D. 2

DATA SET SYMBOL CONFIGURATION DESCRIPTION
(RQ.13) OPEN AYES 87-707 DAI2 D2A
(RQ.13) FLAGGED AYES 87-707 DAI2 D2A



PARAMETRIC VALUES
 ALPHA 20.000 RUDER .000
 ELEVON -20.000 RUFLR 40.000



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [REQD.] 3 OPEN ASES 87-707 DA12 OZA
 [REQD.] 3 FLAGGED ASES 87-707 DA12 OZA

SYMBOL Y/BV BETA MACH
 .673 .160 2.498
 .780 3.040
 .087

CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

==

ALPHA
ELEVON

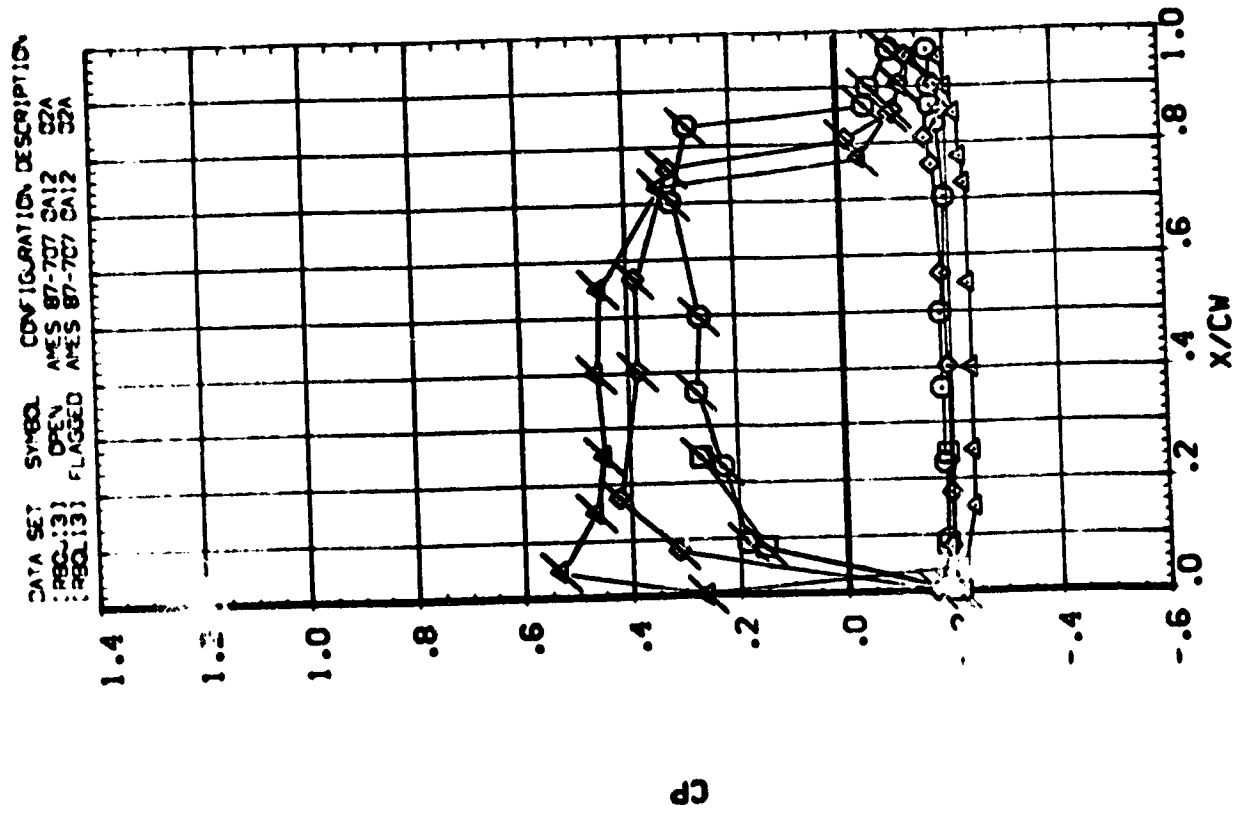
PARALLEL VALVES
20.000 20.000 20.000
20.000 20.000 20.000
40.000 40.000 40.000

SYMBOL
V/BV
0.000
0.000
0.000
0.000
0.000

BETA
5.240

MACH
2.498

UPPER WING
LOWER WING



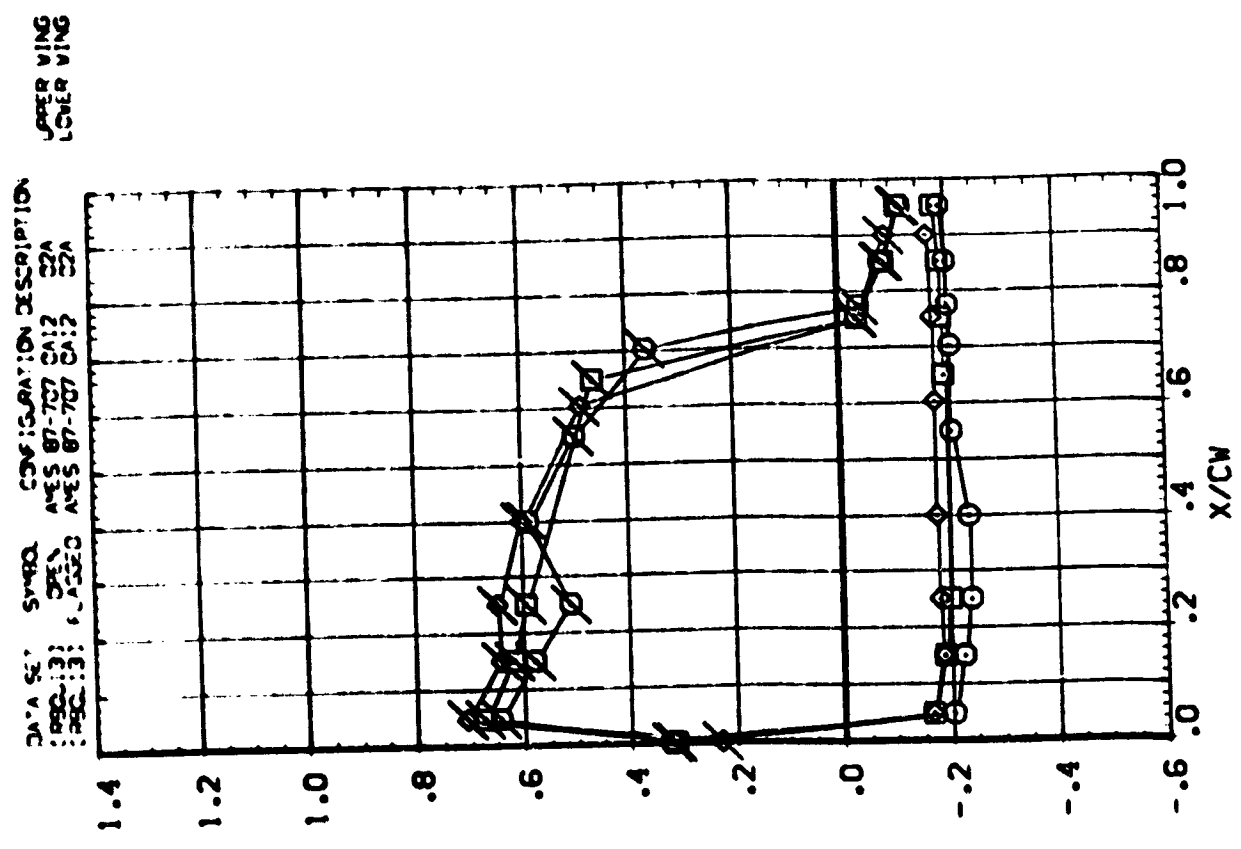
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

054-2
100m

240.9
A. E

000
200
6.0
NE

000.5



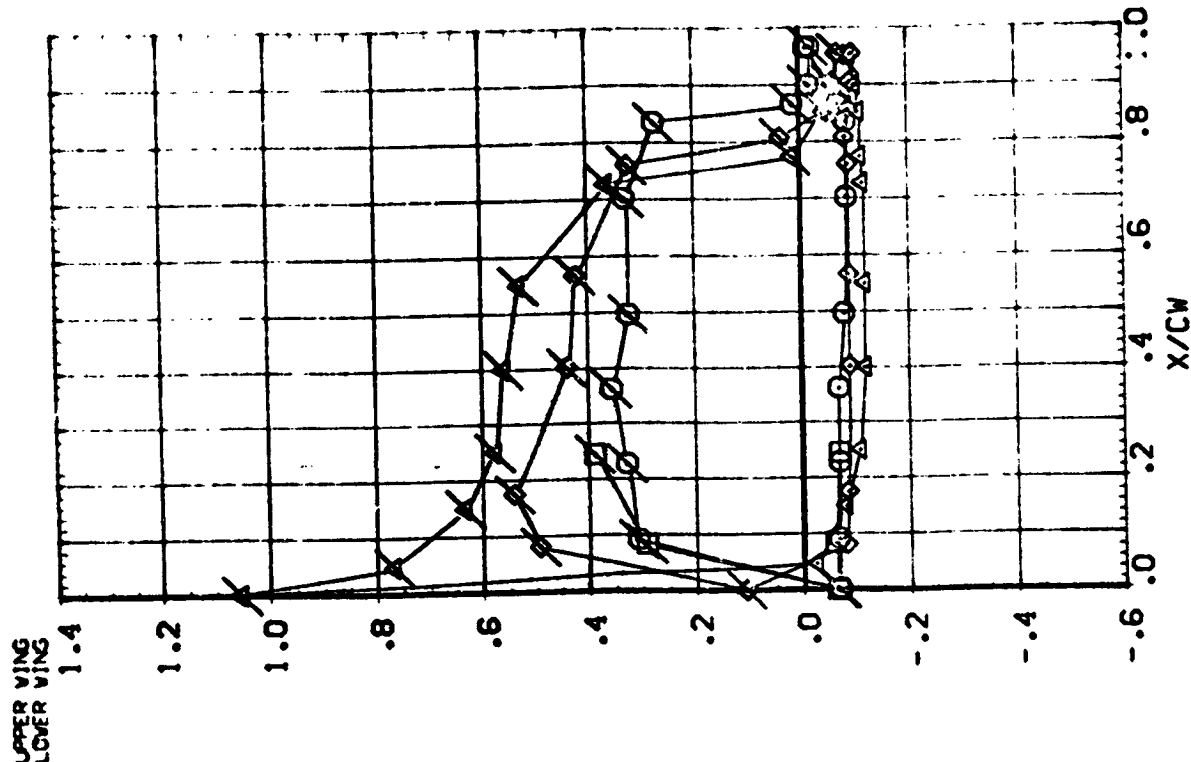
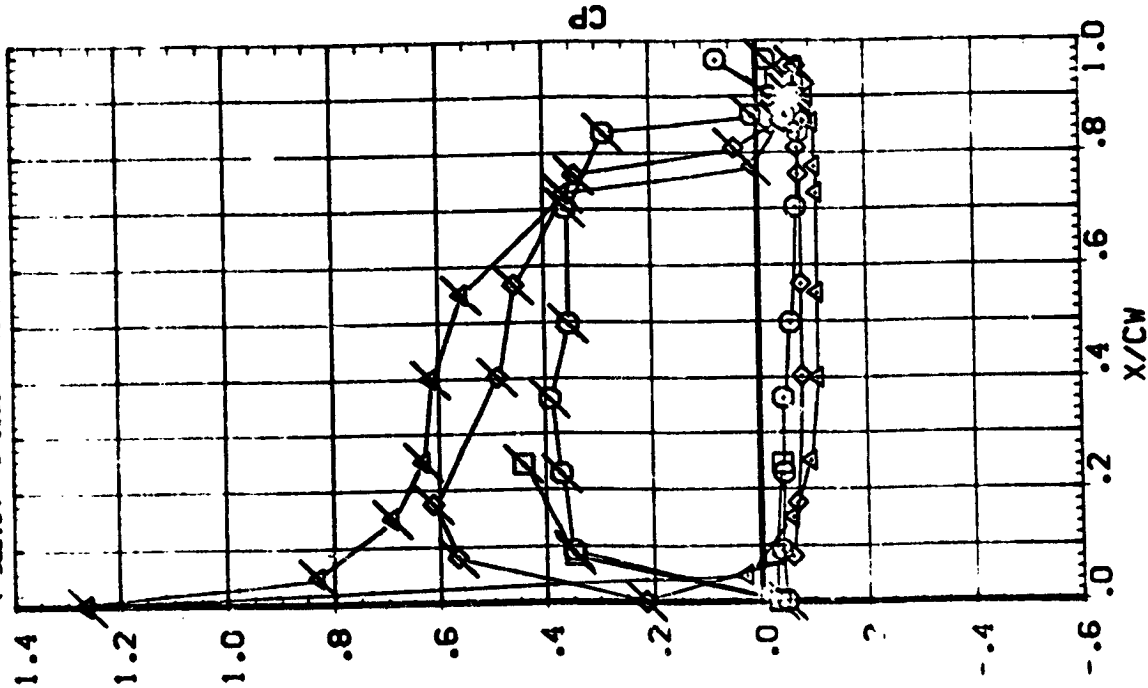
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

SYMBOL γ/β β γ γ/β γ/β γ/β

BETA γ/β γ/β γ/β γ/β γ/β γ/β

PARAMETRIC VALUES
ALPHA 20.000 RUDER .000
ELEVON -20.000 RUDER 40.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
RBC 13 OPEN AMES 87-707 CA12 C2A
RBC 13 FLAGGED AMES 87-707 CA12 C2A

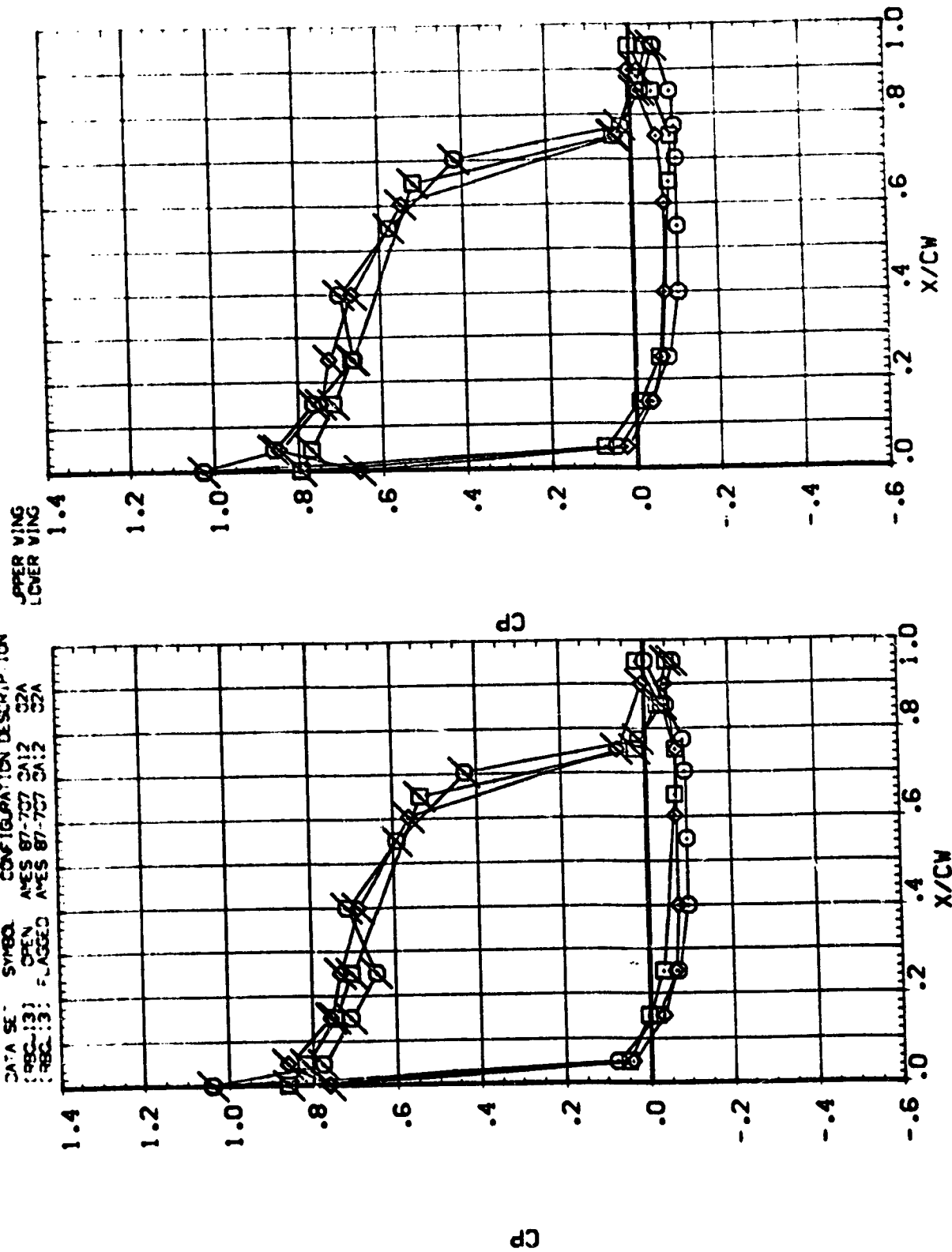


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA 20.000 RUDER 40.000
 ELEV -20.000 RUDER 40.000

S-NO. 1/34 BETA 3.502
 .673 -6.710
 .780 -3.440
 .987

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 88C-13 OPEN ARES 87-707 CA12 C2A
 88C-13 FLAGGED ARES 87-707 CA12 C2A

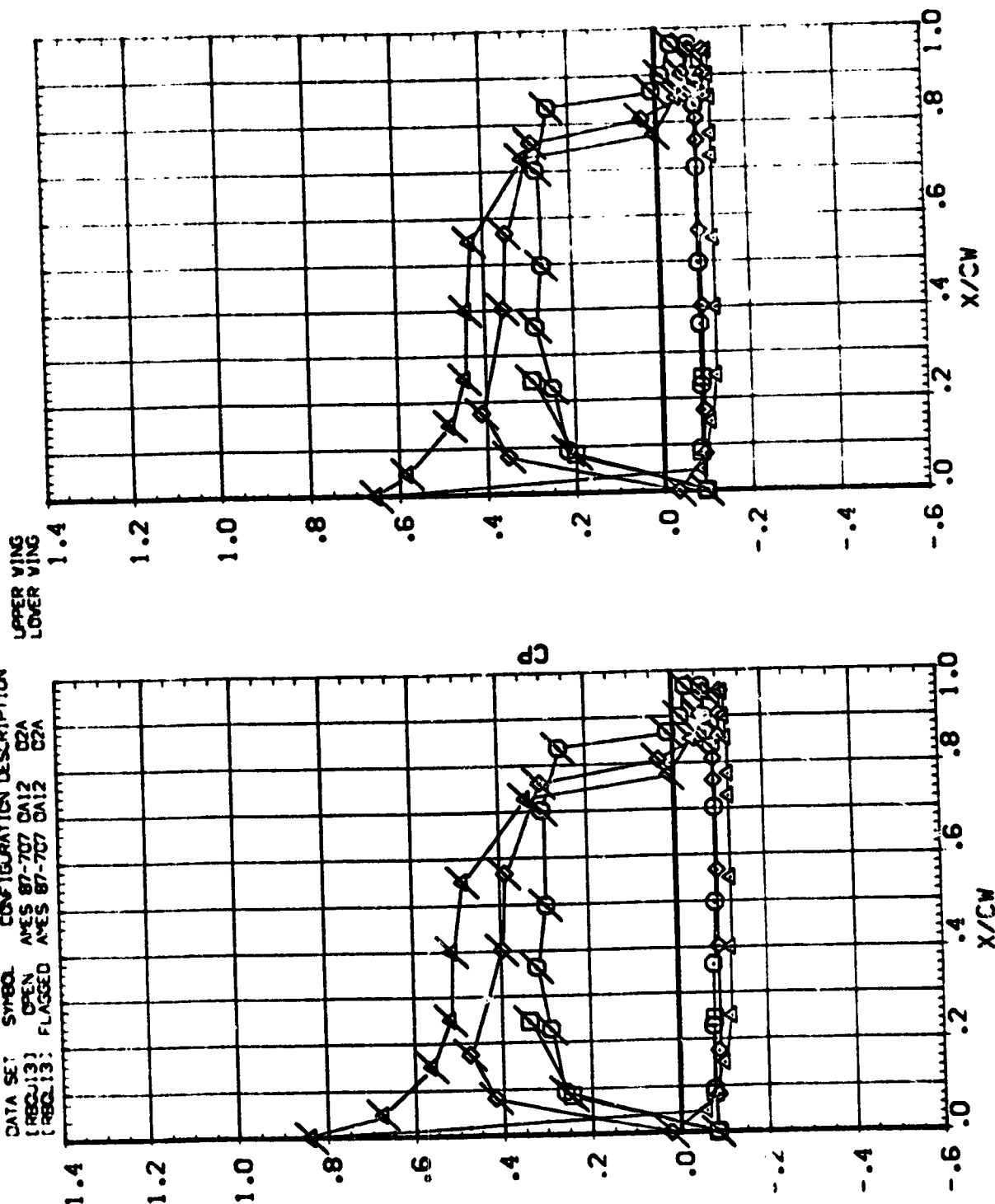


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA 20.000 RUDER 42.000
 ELEVON -20.000 RUFLR

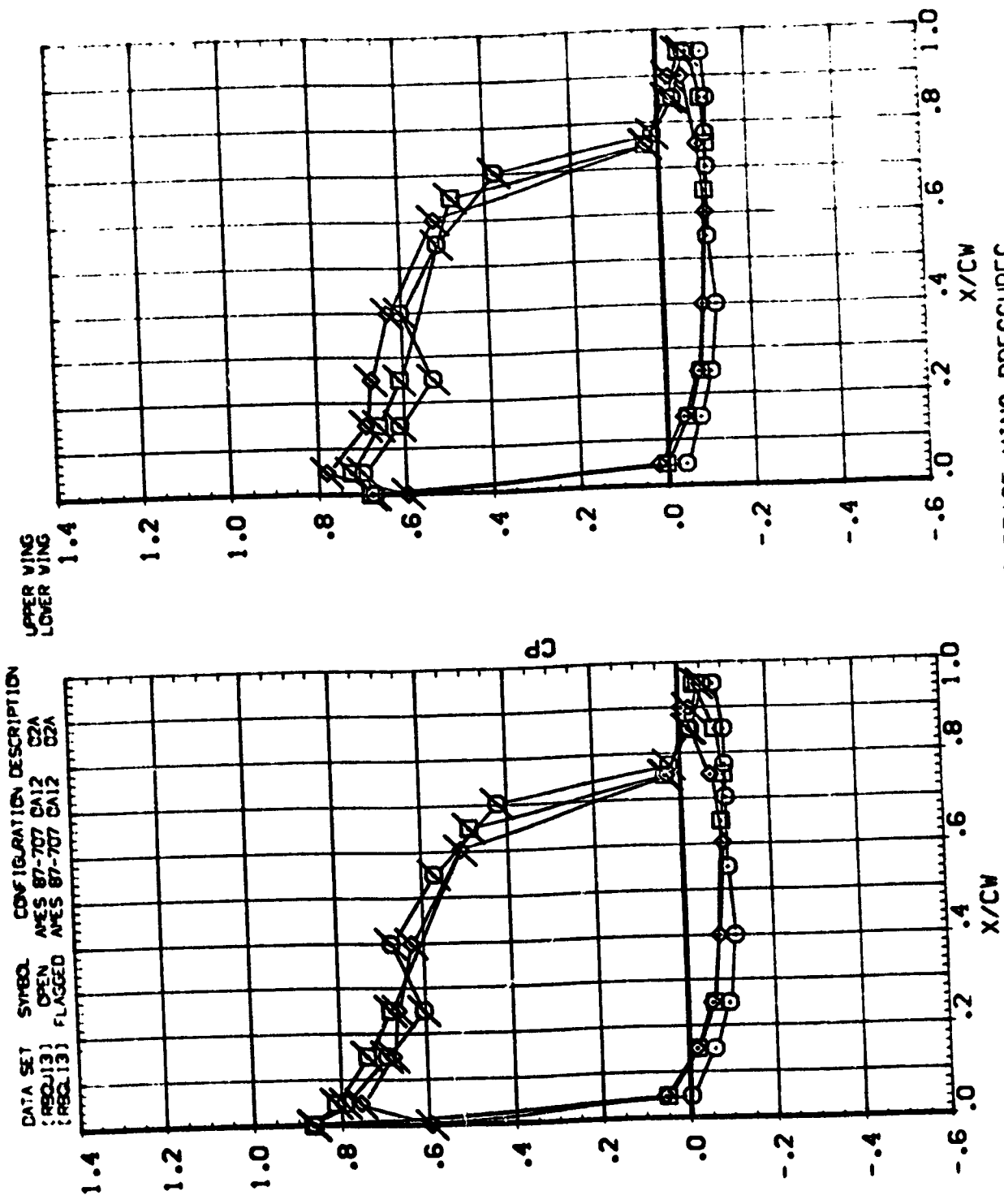
SYMBOL 1/B₀ BETA WAC
 .298 .160 3.507
 .364 3.160
 .477
 .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [REQ13] OPEN AMES 87-707 DA12 C2A
 [REQ13] FLAGGED AMES 87-707 DA12 C2A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

Symbol	Value	Symbol	Value
Δ	0.887	Δ	3.502
\square	0.787	\square	3.160
∇	0.673	∇	2.160
\circ	0.585	\circ	1.714



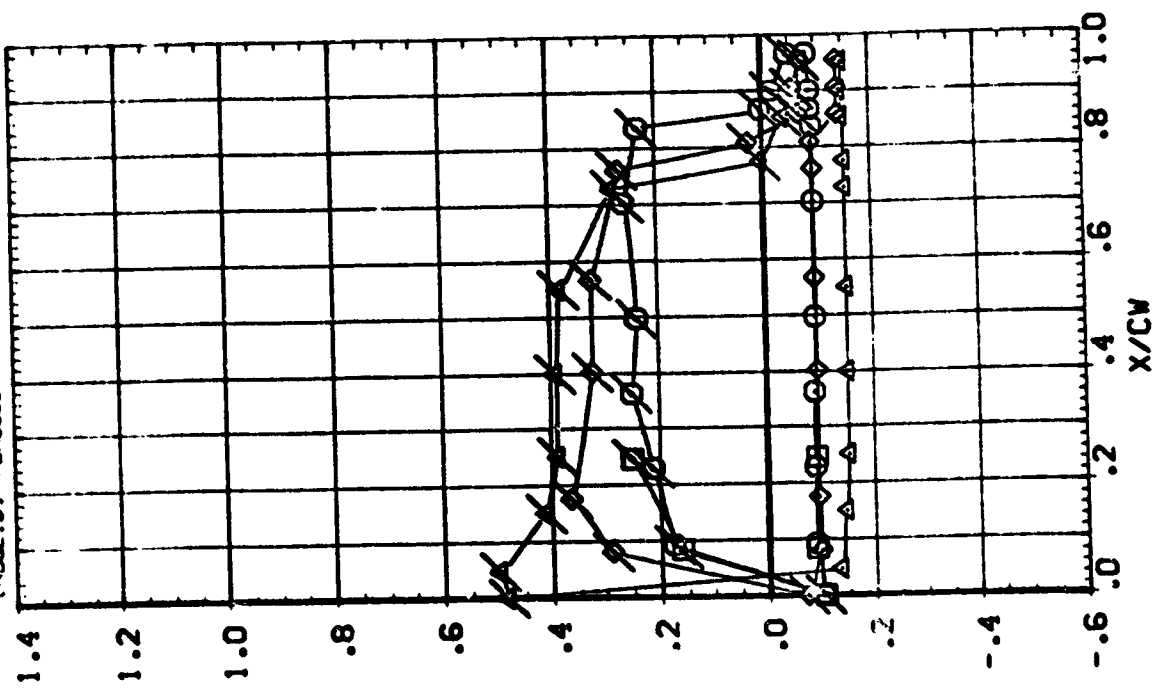
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

UNCLASSIFIED
 20.000
 -20.000
 ALPHA
 ELEVON
 .000
 .000
 .000
 40.000

SYMBOL
 VIB
 BETA
 WACH
 .299
 .364
 .427
 .534
 6.47C
 3.502

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RBOJ13) OPEN AVES 87-707 CA12 C2A
 (RBOJ13) FLAGED AVES 87-707 CA12 C2A

UPPER WING
 LOWER WING

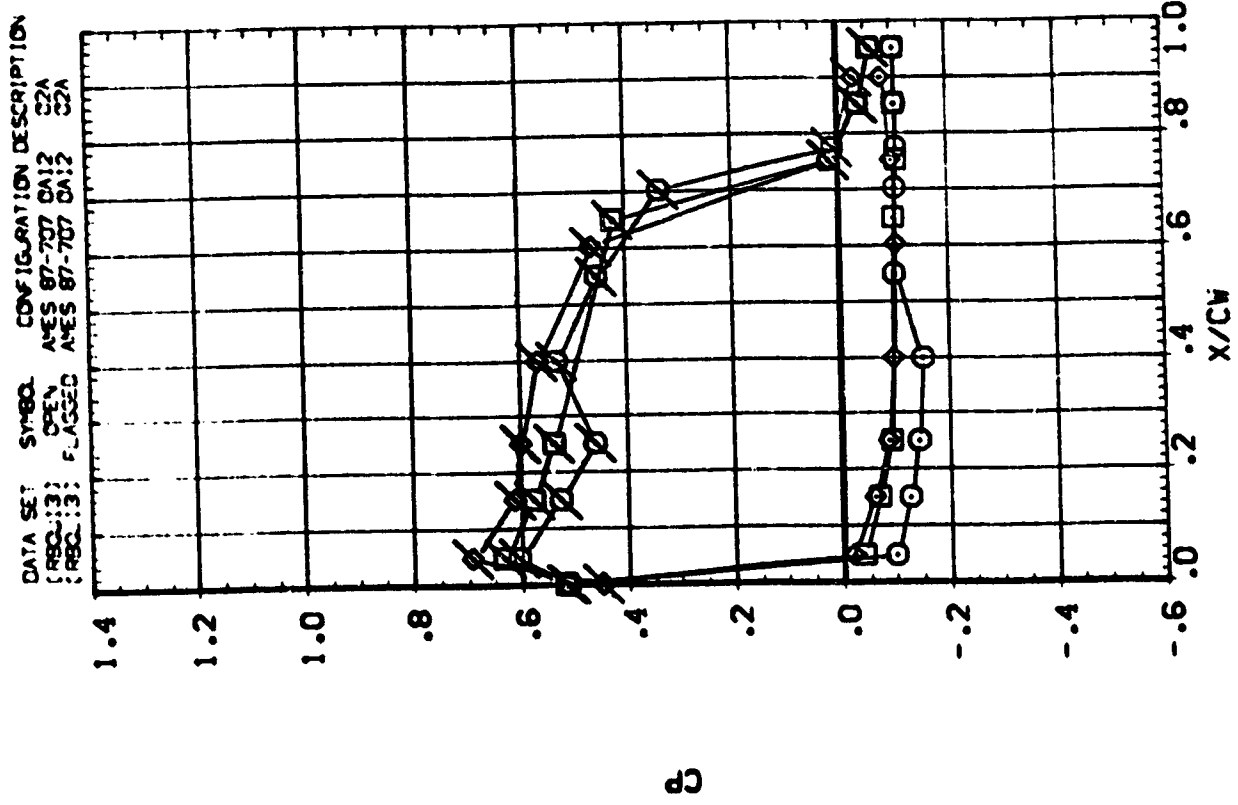


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA 20.000 RDOER .000
 ELEVON -20.000 RDOF .7 40.000

SYMBOL V/B₀ BE'A WAC
 () .673 6.470 3.502
 () .780
 () .887

UPPER WING
 LOWER WING



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

ALPHA
ELEVON

U
-40.000 .000 .000

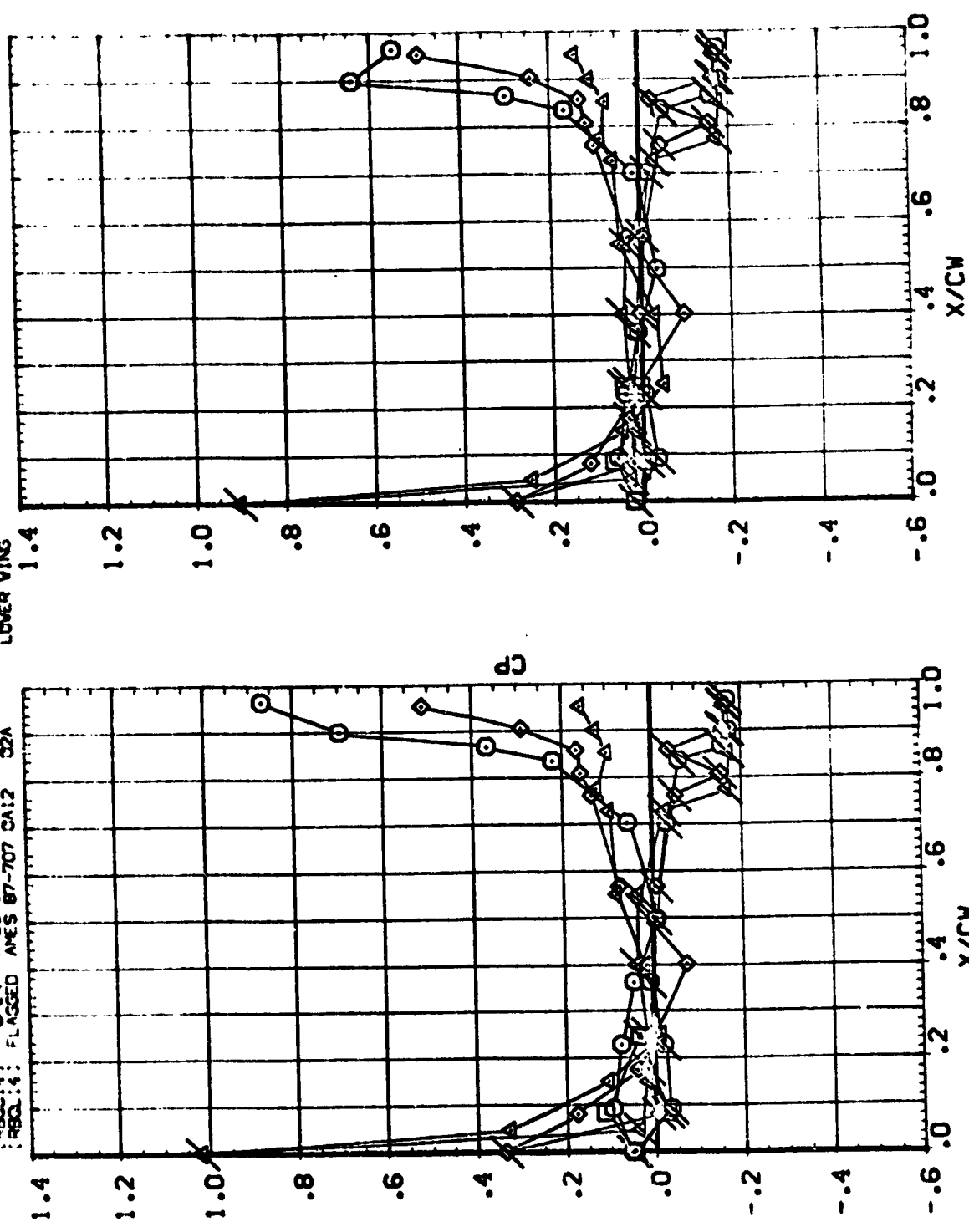
RJDFLR RJDFLR .000 .000

SYNTH
V/B
.299
.364
.427
.534

BE'A
-5.44C
-3.30C

MACH
2.498

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 :RBC:14: OPEN ANES 87-707 CA12 C2A
 :RBC:14: FLAGGED ANES 87-707 CA12 C2A

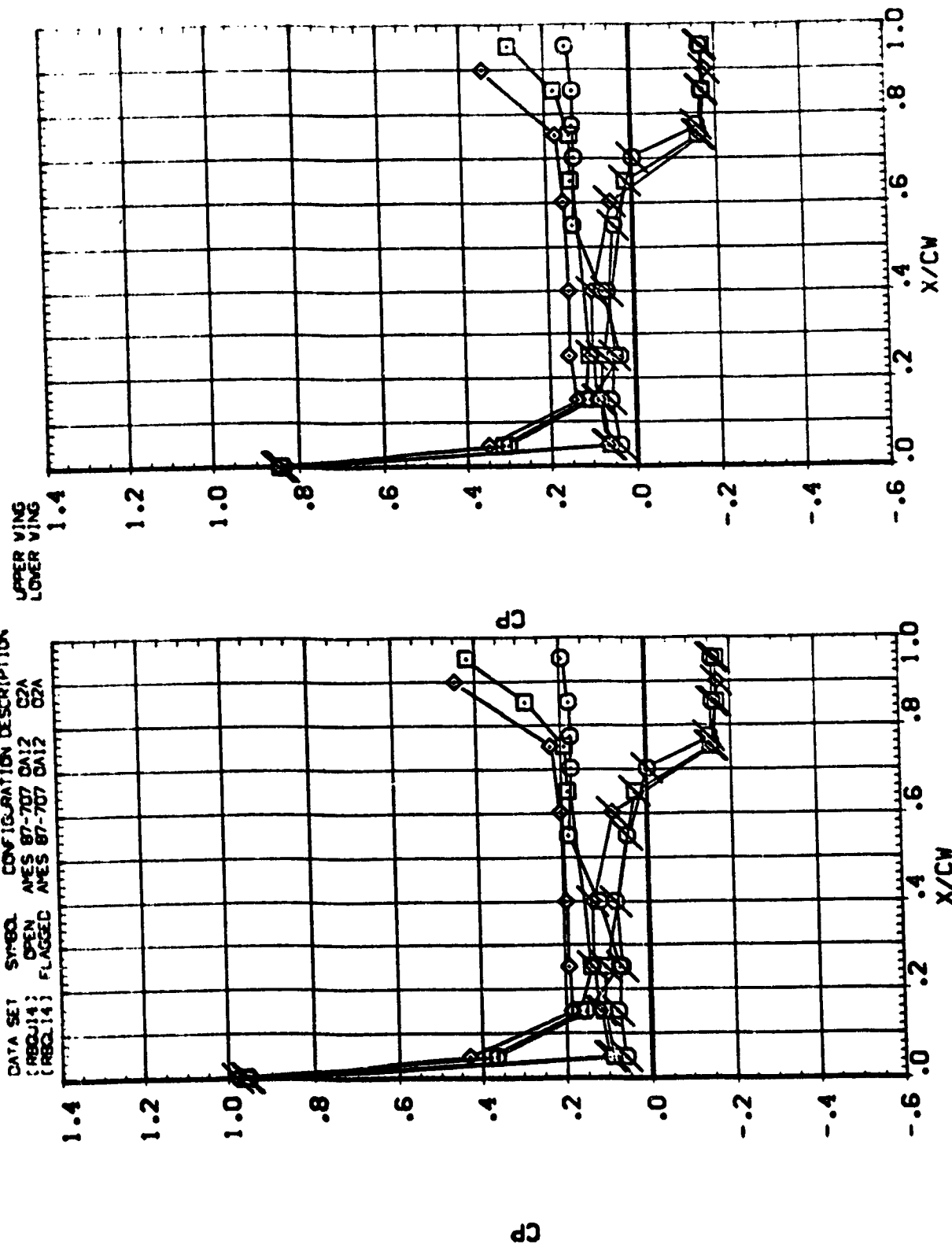


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA .000 RUDER .000
 ELEVON -40.000 RUJLR 40.000

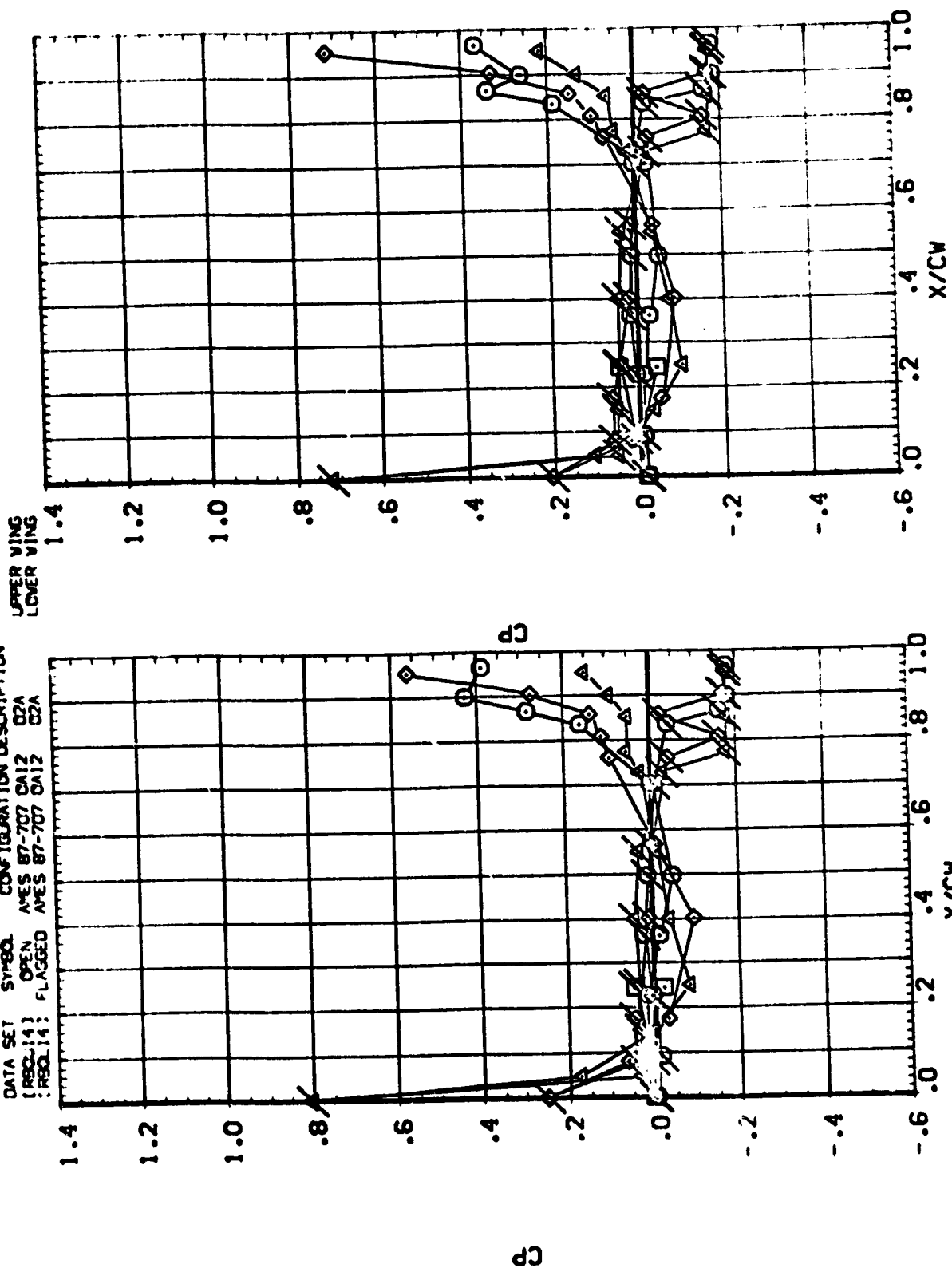
SYMBOL Y/BV BETA MAC
 .673 -6.440 7.498
 .760 -3.300
 .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REQJ14) OPEN ANES 87-707 DA12 C2A
 (REQJ14) FLAGGED ANES 87-707 DA12 C2A



5123	Y/BA	BETA	WAC
2	.799	-.170	2.498
3	.364	3.060	

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(REQ:14)	OPEN	AVES 87-707 CA12 02A
	CLOSING	AVES 87-707 CA12 02A

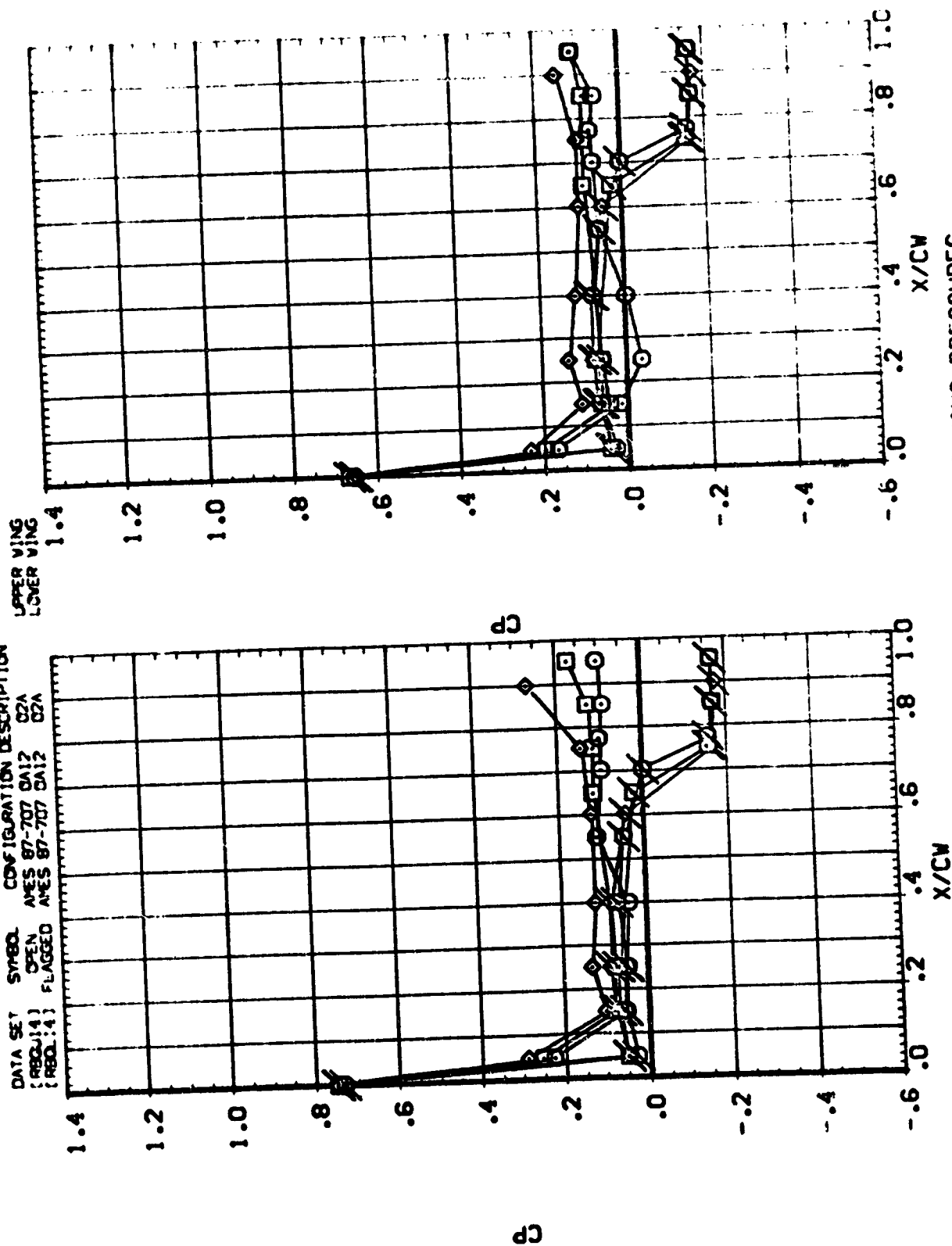


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

ST. JAMES

SYNOPSIS	Y/BA	BETA	MAC
□□□	.673	-.170	2.498
□□□	.780	3.060	
◇	.687		

DATA SET	SYMBOL	CONFIGURATION	DESCRIPTION
(REQ) 14	OPEN	ANES 87-707	DA12 02A
(REQ) 14	FLANGED	ANES 87-707	DA12 02A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

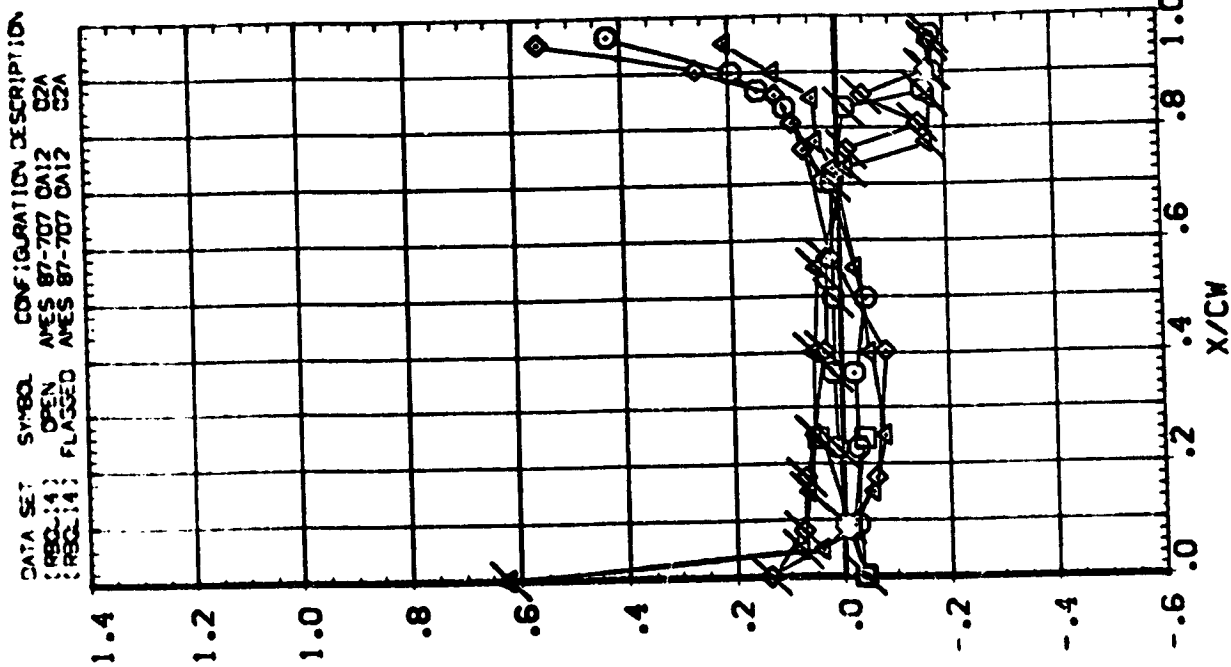
PAGE: 142

SYMBOL: 1/3, .799, .364, .427, .534

BETA: 6.28C WACH: 2.498

PARAMETRIC VALUES
ALPHA: .000
ELEVON: 40.000
RODIER: .000
ROR: 2

UPPER WING
LOWER WING



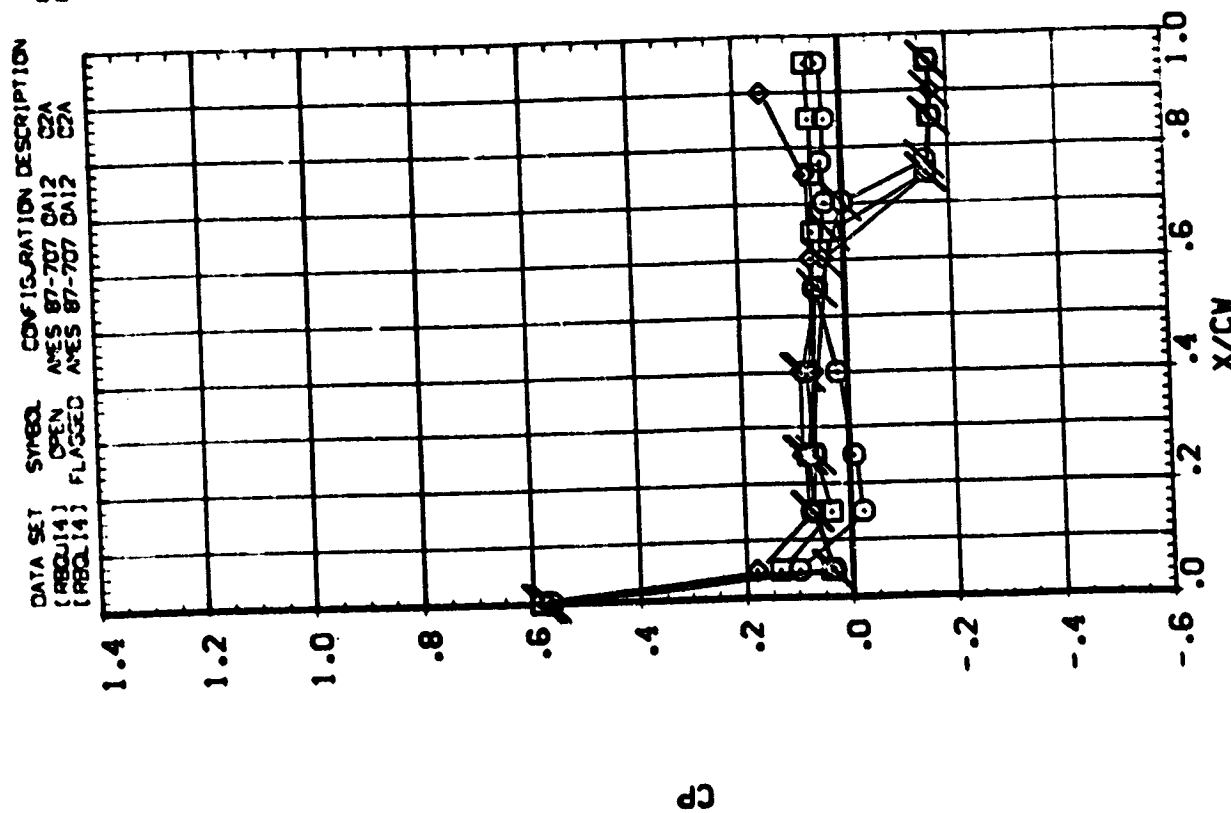
82

CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA .000
 ELEVATION .000
 RDOOR 40.000
 RDOFLR 40.000

SYMBOL Y/BV BETA MACH
 .673 6.290 2.498
 .78C
 .887

UPPER WING
 LOWER WING

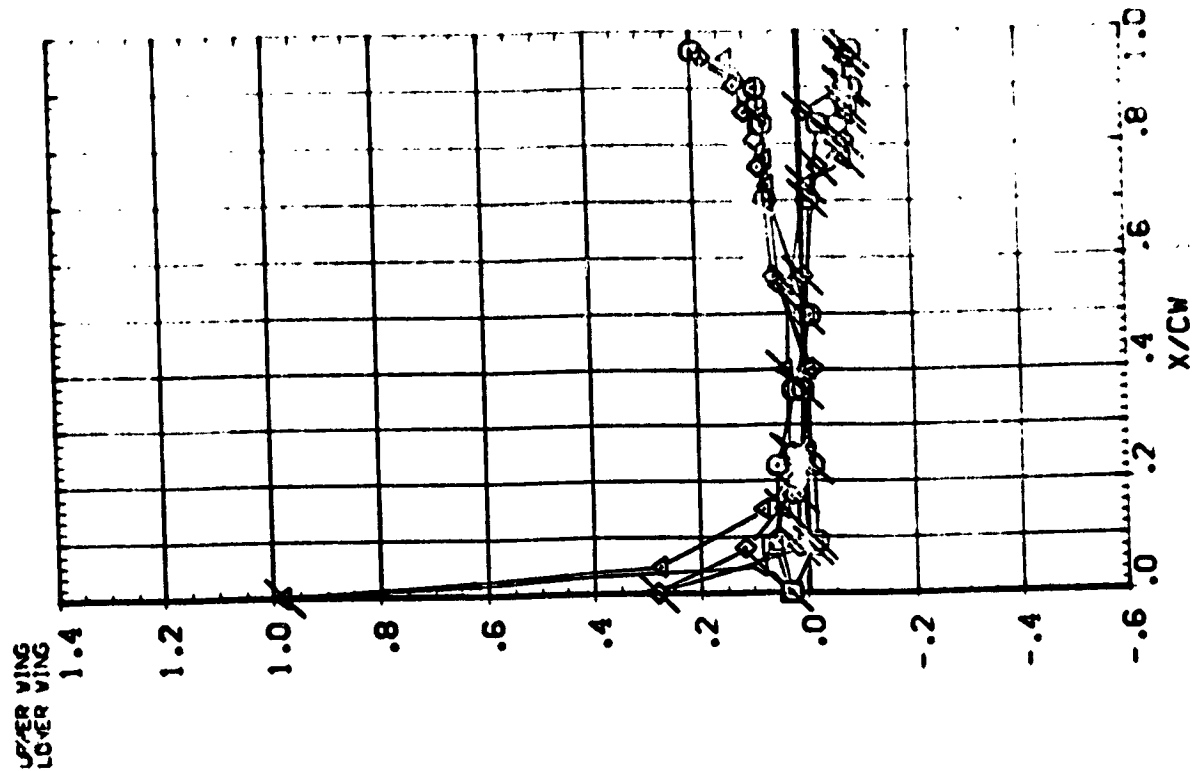
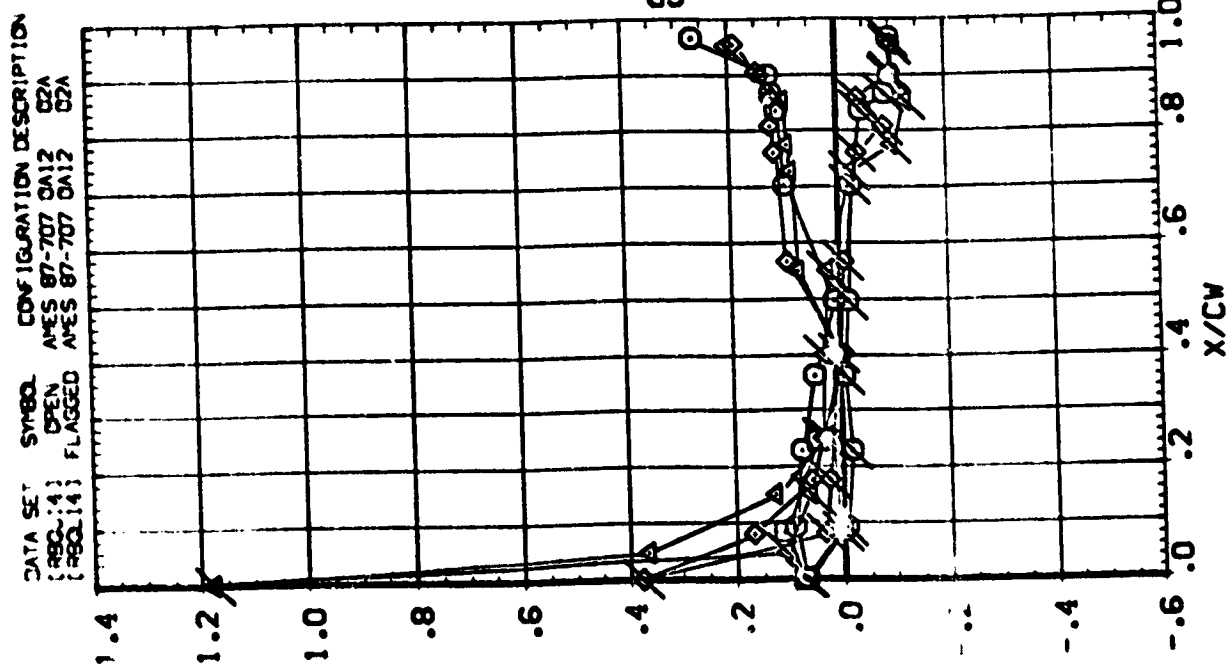


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES



PARAMETRIC VALUES
ALPHA .000 RUDER .000
ELEVON -40.000 RUDER 2 40.000

SYMBOL V/SN BETA MACH
.299 -6.67C 3.503
.364 -3.42C
.427
.534

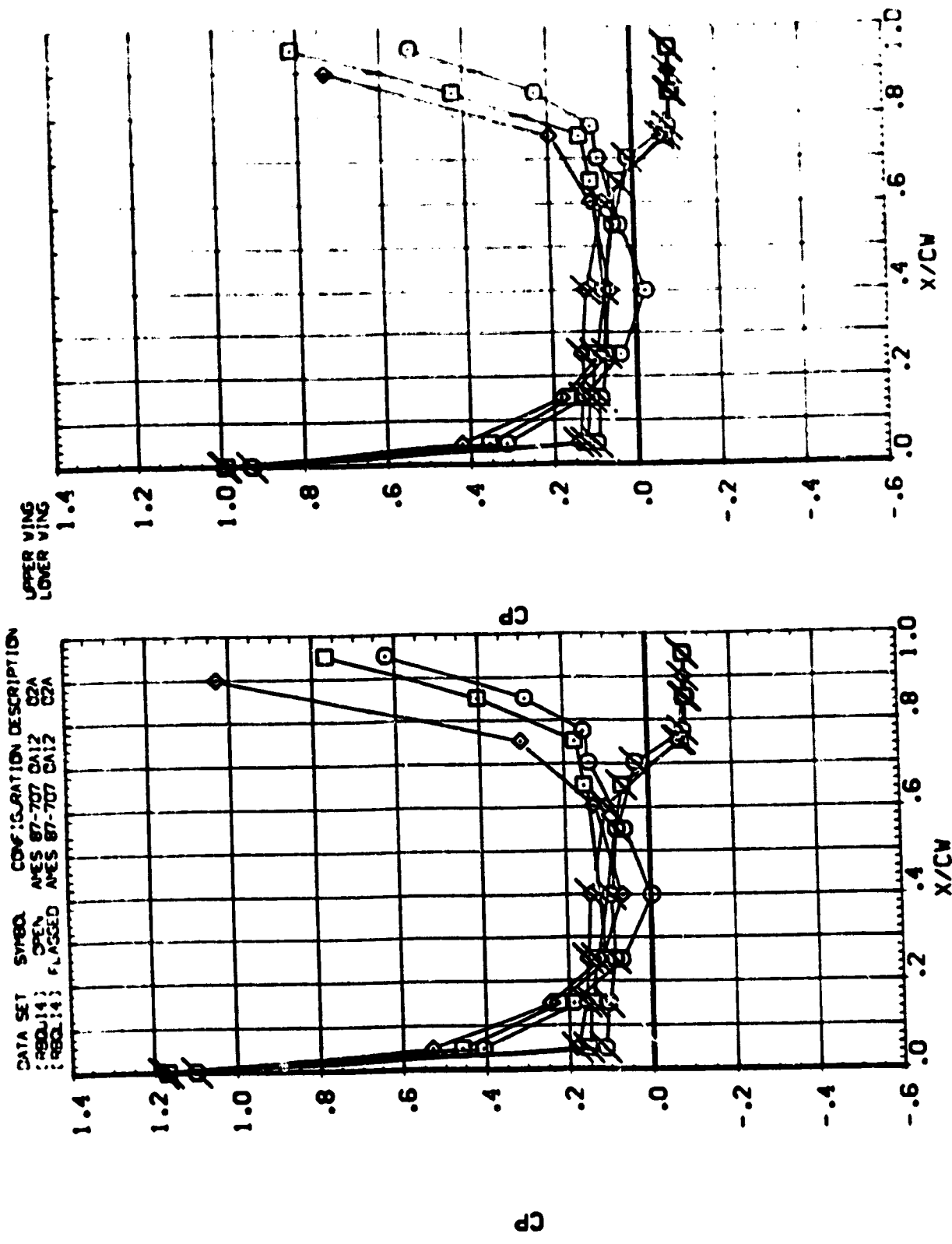


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

ELEV 42.500
 0.373
 42.500

3.503
 3.470

0.673
 0.780
 0.897



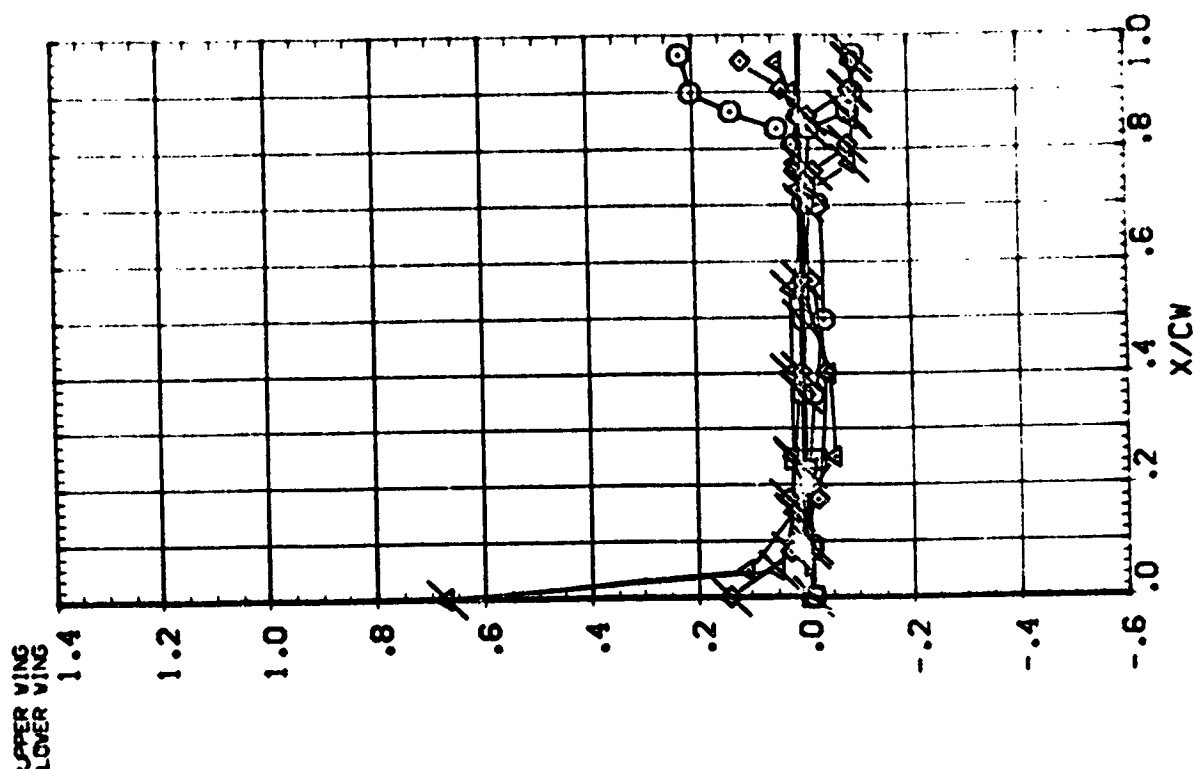
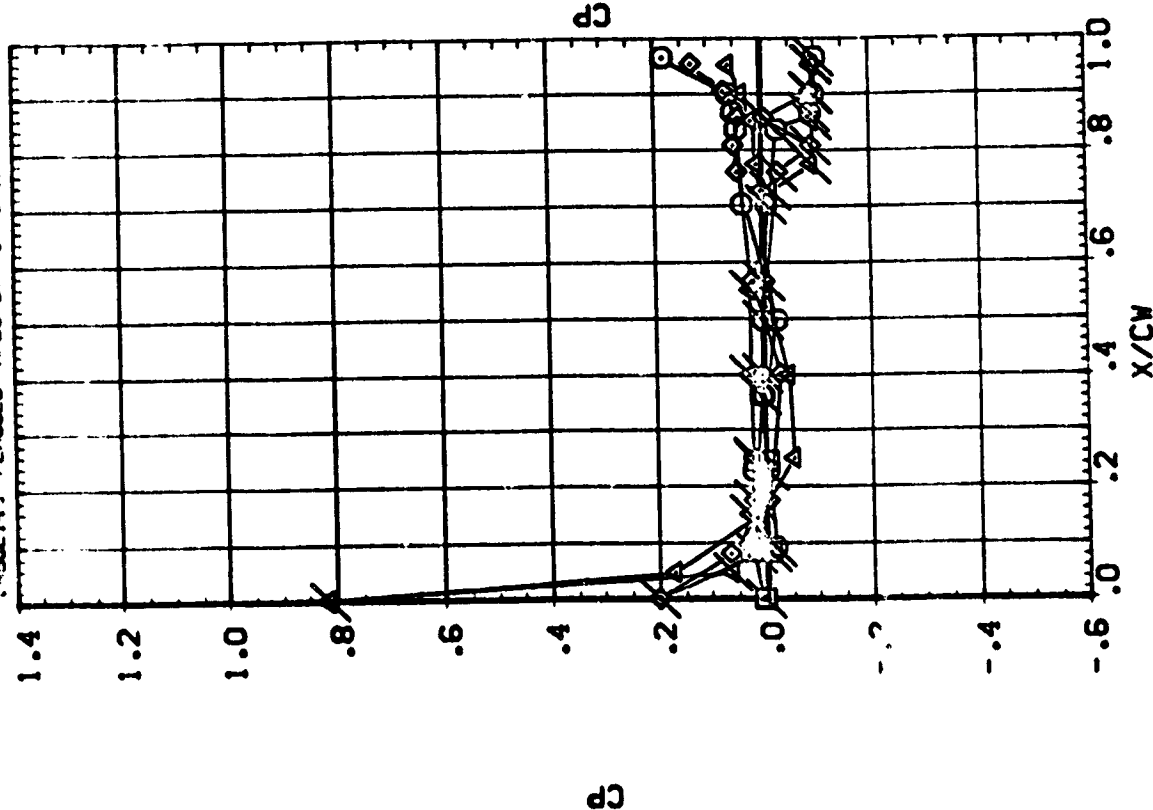
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

3.503

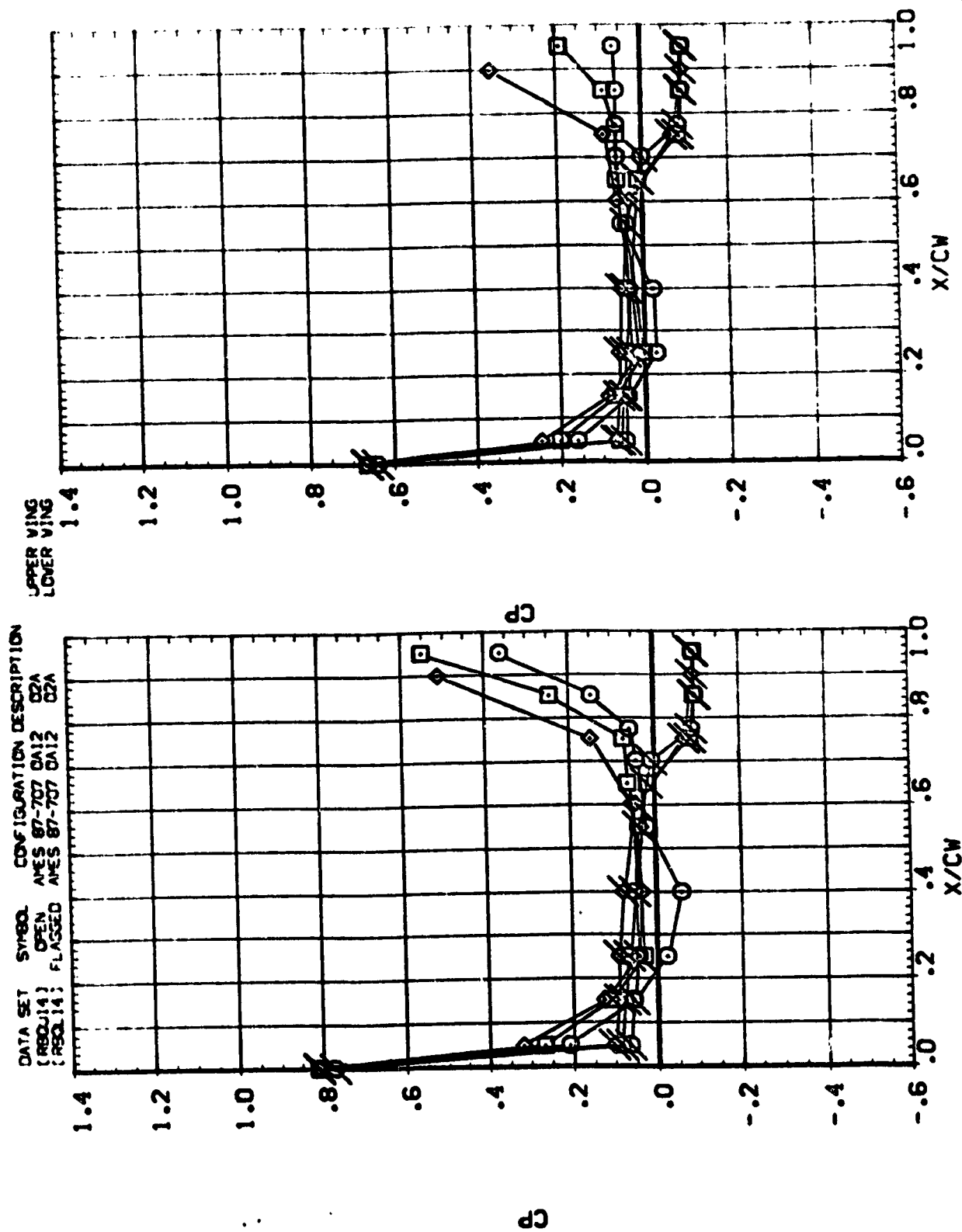
PARAMETER VALUES
ALPHA .000
ELEVON -40.000

88.

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(RSC) 14	OPEN	A=ES 87-707 CA12 C2A
280 14	FLAGGED	A=ES 87-707 CA12 C2A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE SUCING PRESSURES



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

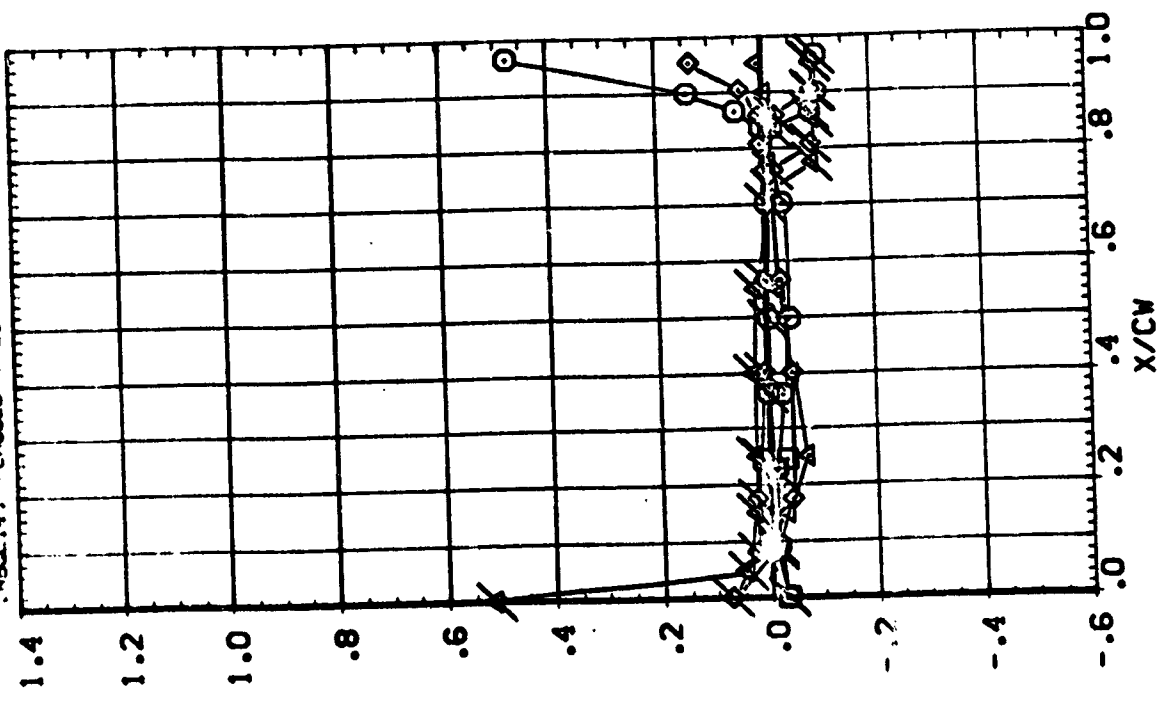
ELEVATION

6.520 1.000

0.488
0.364
0.427
0.534

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 : REC-14 : OPEN AMES 87-707 CA12 CZA
 : REC-14 : FLAGGED AMES 87-707 CA12 CZA

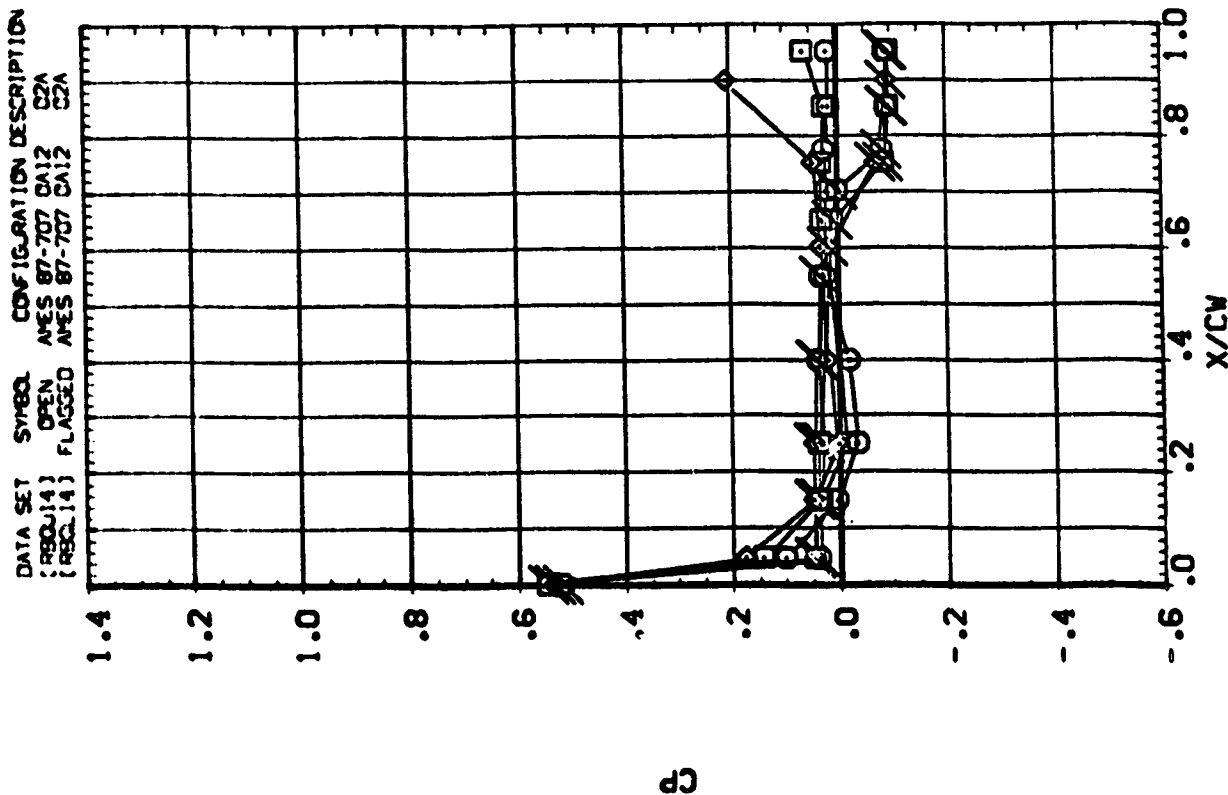
UPPER WING
 LOWER WING



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA .000 RDOER .000
 ELEVON -42.000 RDOER 42.000

UPPER WING
 LOWER WING



SYMBOL
 ()
 []
 < >

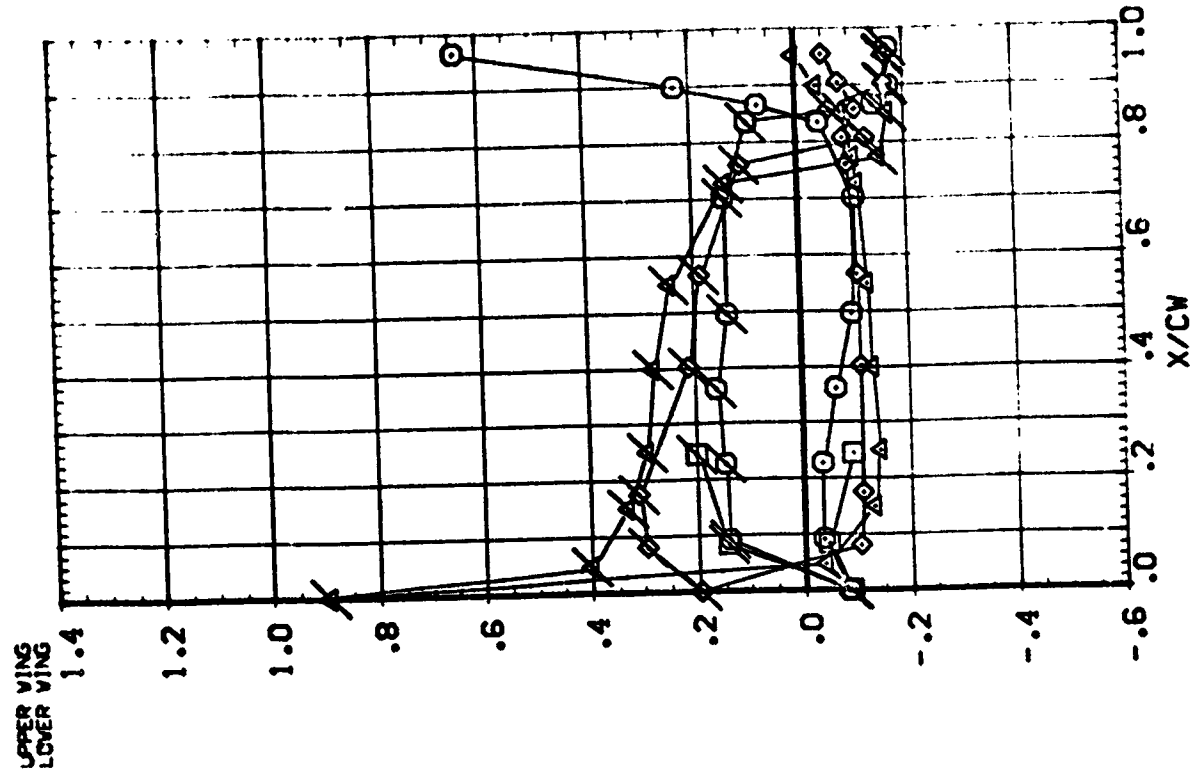
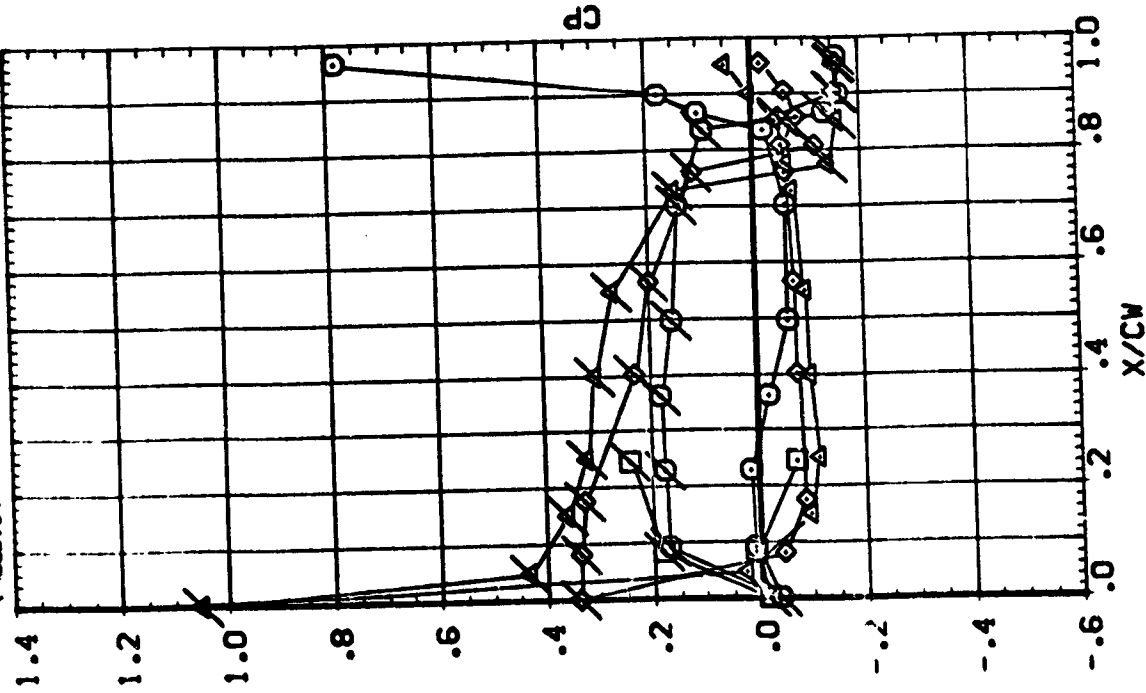
Y/BN
 .299
 .364
 .427
 .534

BETA
 -6.520
 -3.340

MACH
 2.498

PARAMETRIC VALUES
 ALPHA
 ELEVON
 10.000
 -40.000
 RUDDER
 RUDDER
 40.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REQ.15) OPEN AMES 87-707 DAI2 Q2A
 (REQ.15) FLAGGED AMES 87-707 DAI2 Q2A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

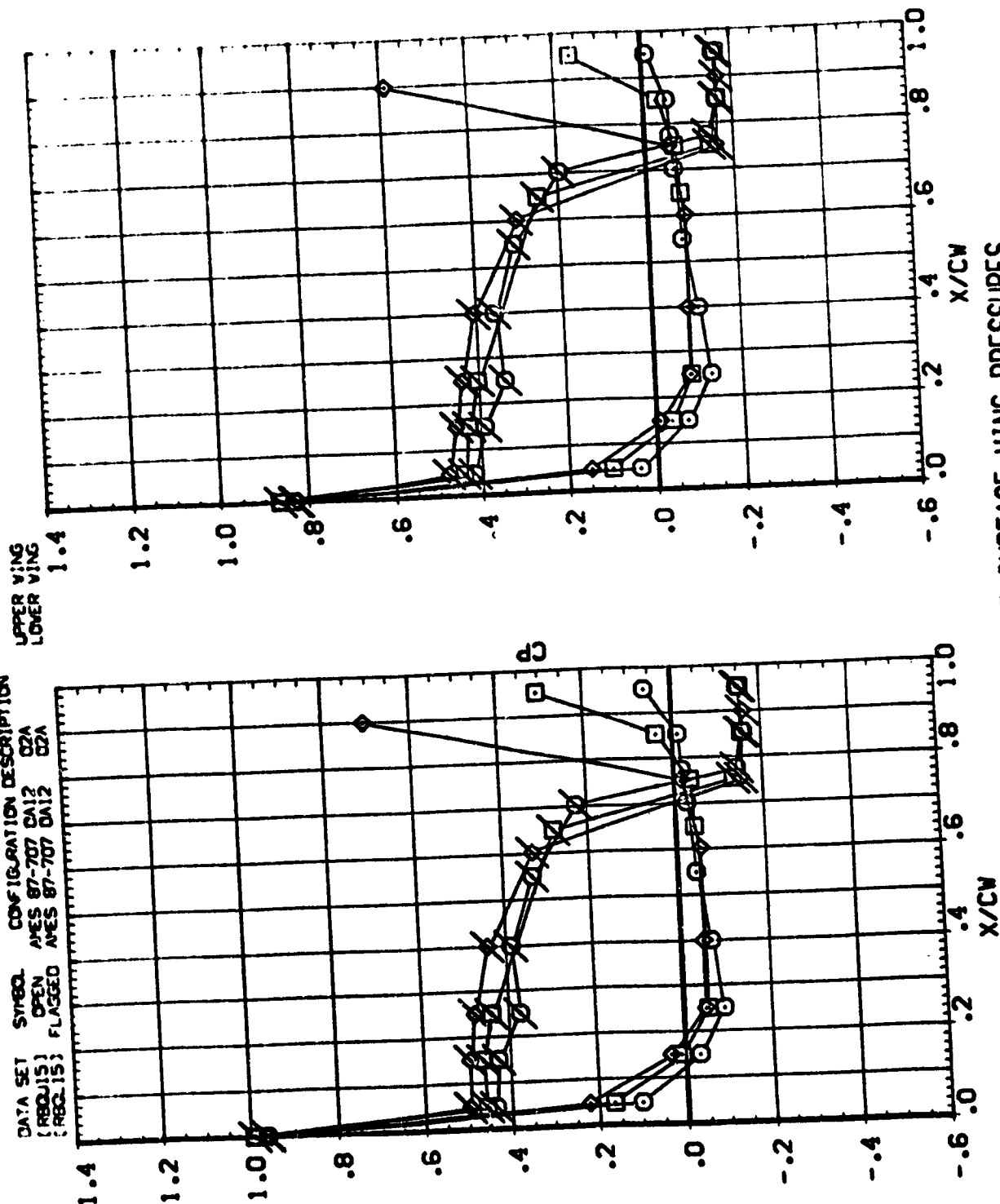
५५

200

BE "A	WACH
-6.520	2.498
-3.340	

SYMBOL	WAVELENGTH
Q11	.673
Q12	.780
Q13	.887

DATA SET	SYMBOL	CONFIGURATION	DESCRIPTION
OPEN	AVES 87-707	CA12	02A
FLAGGED	AVES 87-707	DA12	02A

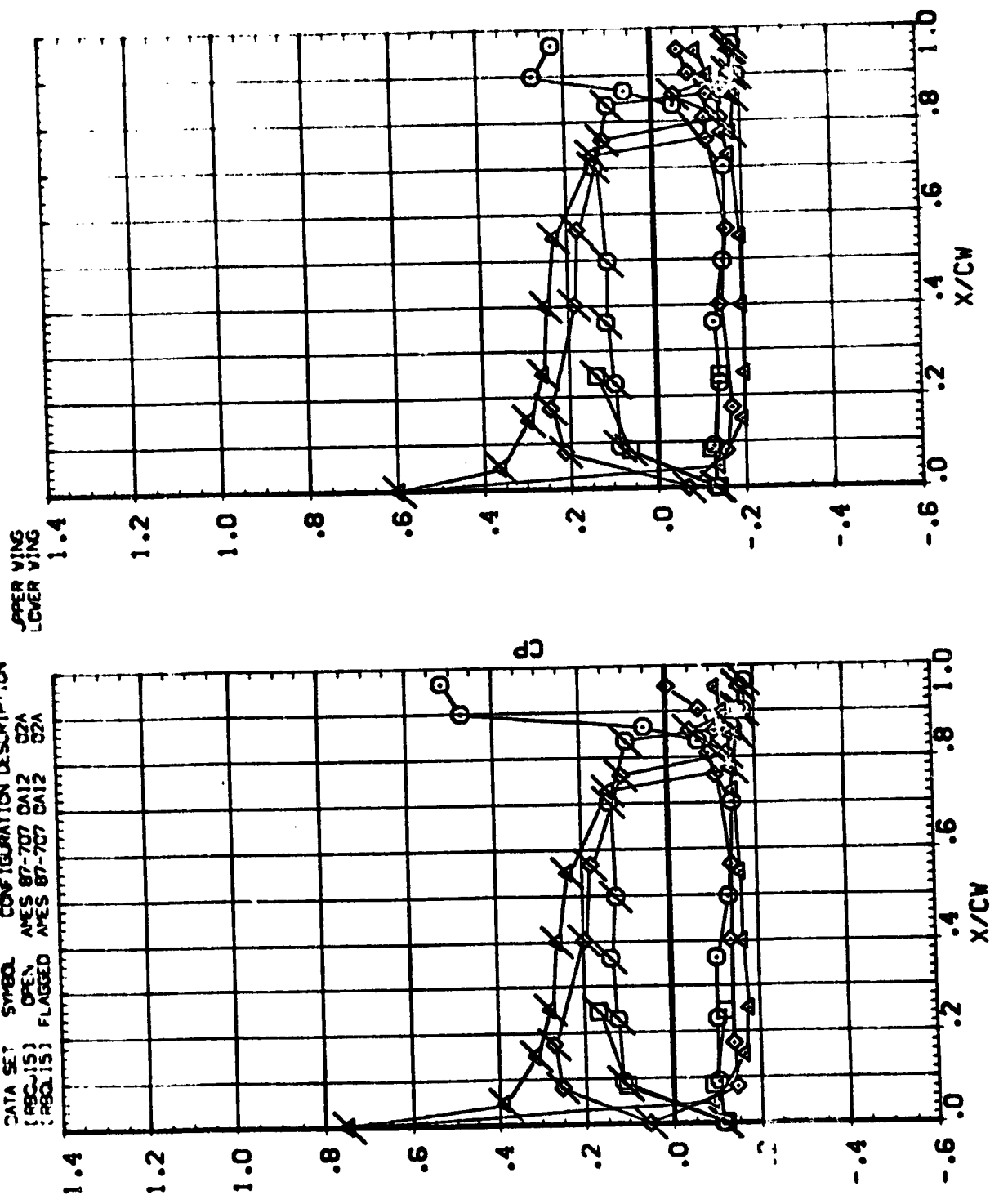


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

IIIII IV
 ALPHA
 ELEVON
 15.000
 40.000
 9.000
 9.000
 40.000

Symb. 1/30
 .288
 .364
 .427
 .534
 BE °A
 -1.70
 3.020
 MACH
 2.498

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [REQ.15] OPEN APES 87-707 DA12 G2A
 [REQ.15] FLAGGED APES 87-707 DA12 G2A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

ALPHA
ELEVON

-40.000
-40.000

40.000

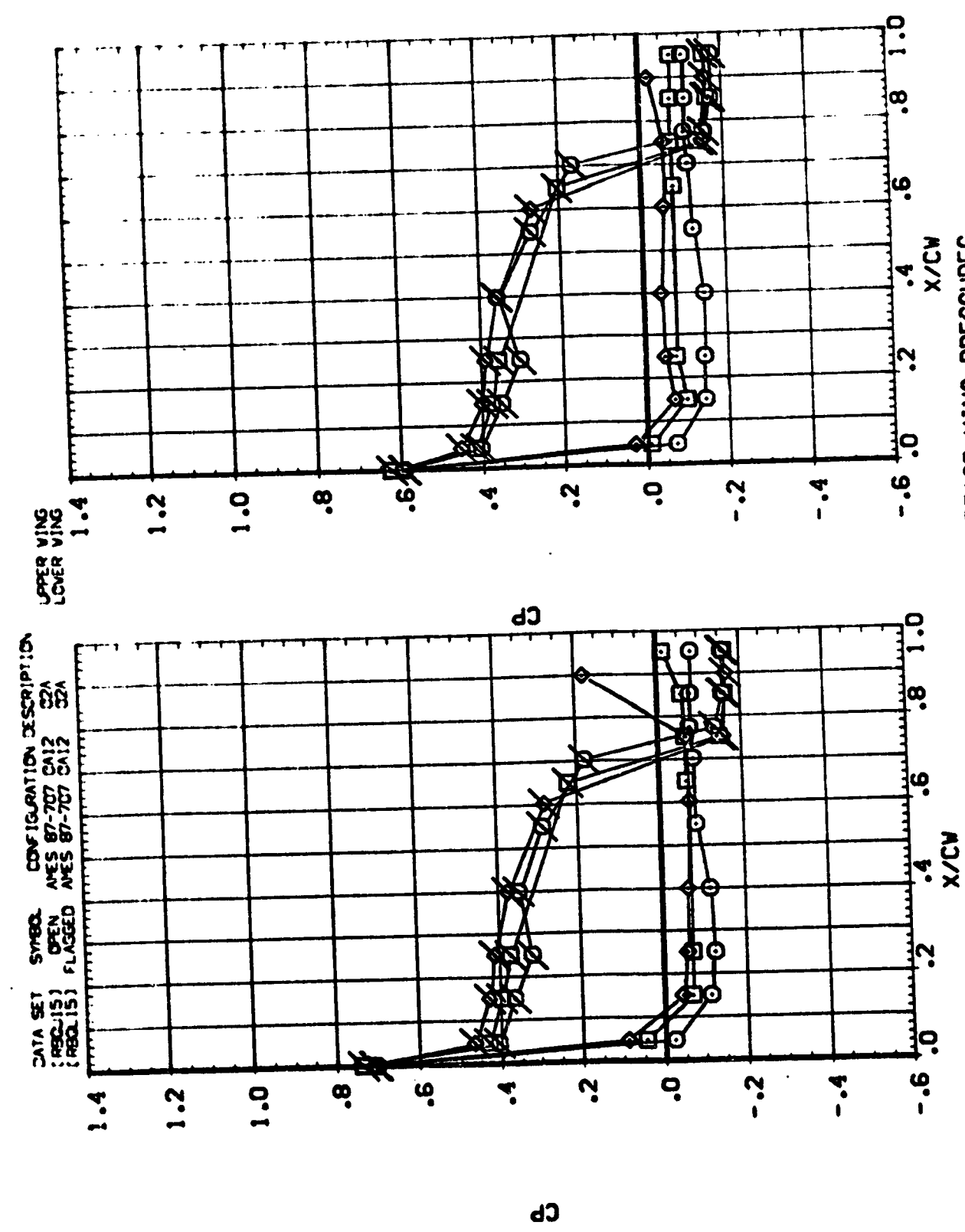
BETA
-1.170
3.020

Y/B
.573
.780
.887

SYMBOL
O
O
O

MACH
2.498

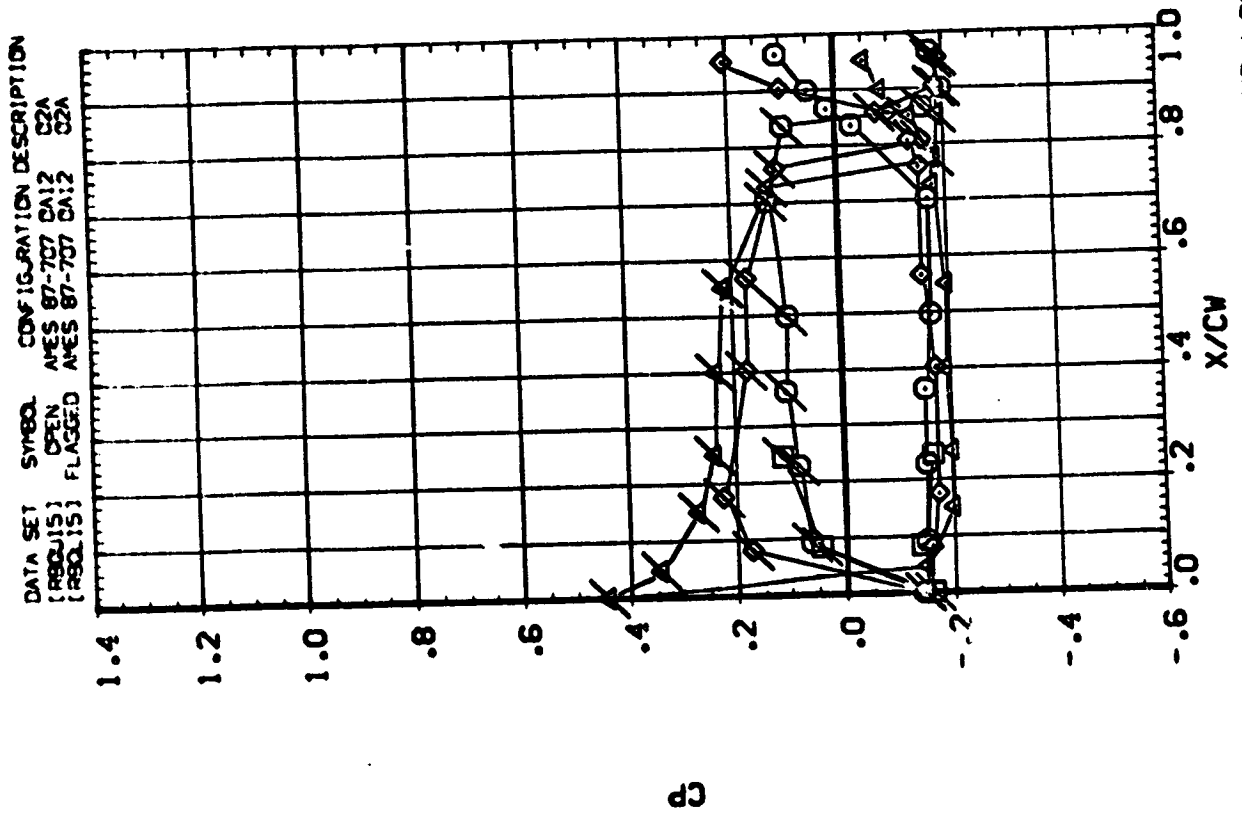
CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES



PARAMETRIC VALUES
 ALPHA 12.000 RUDER 40.000
 ELEVON -40.000 RUDFLR

SYMBOL Y/B₀ BETA MACH
 () .299 6.200 2.498
 () .364
 () .427
 () .534

UPPER WING
 LOWER WING

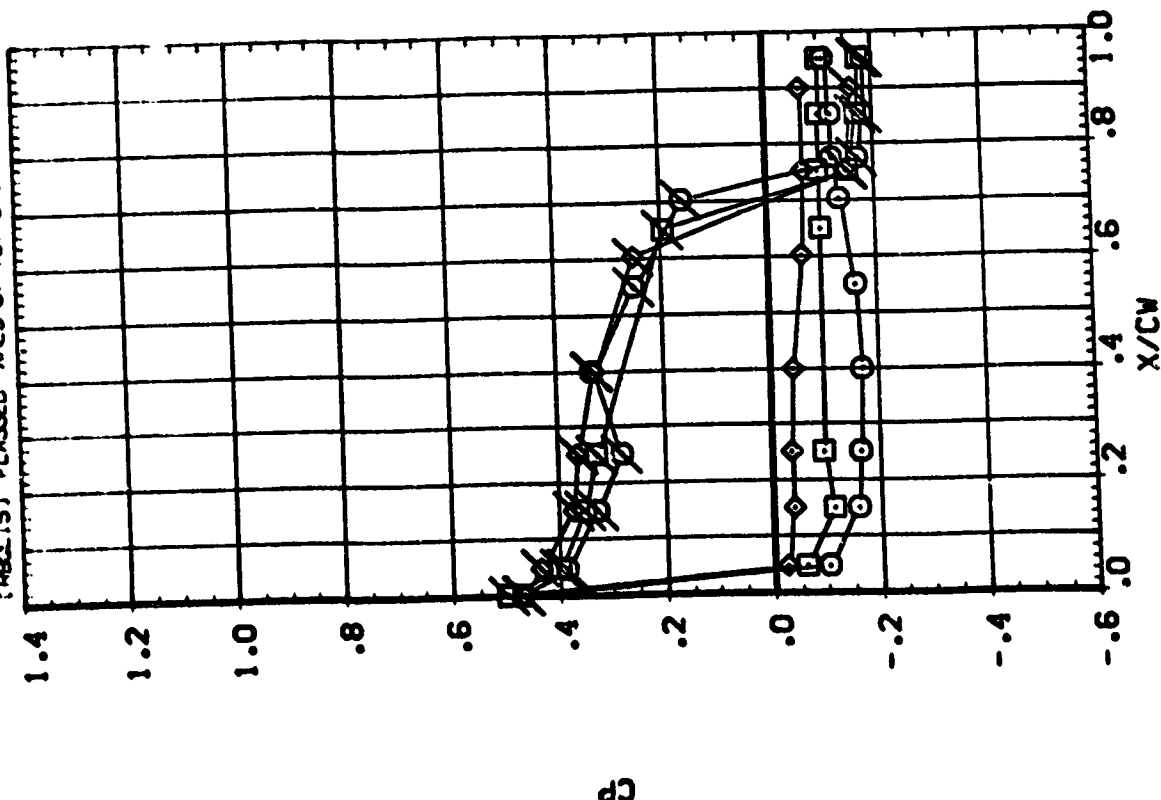


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA: 0.000 RUD: 0.000
 ELEVON: -40.000 RUD: 0.000

SYMBOL Y/BV BE TA MAC
 .673 6.200 2.498
 .780
 .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RBC) 15 OPEN ANES 87-707 DAI2 C2A
 (RBC) 15 FLAGGED ANES 87-707 DAI2 C2A

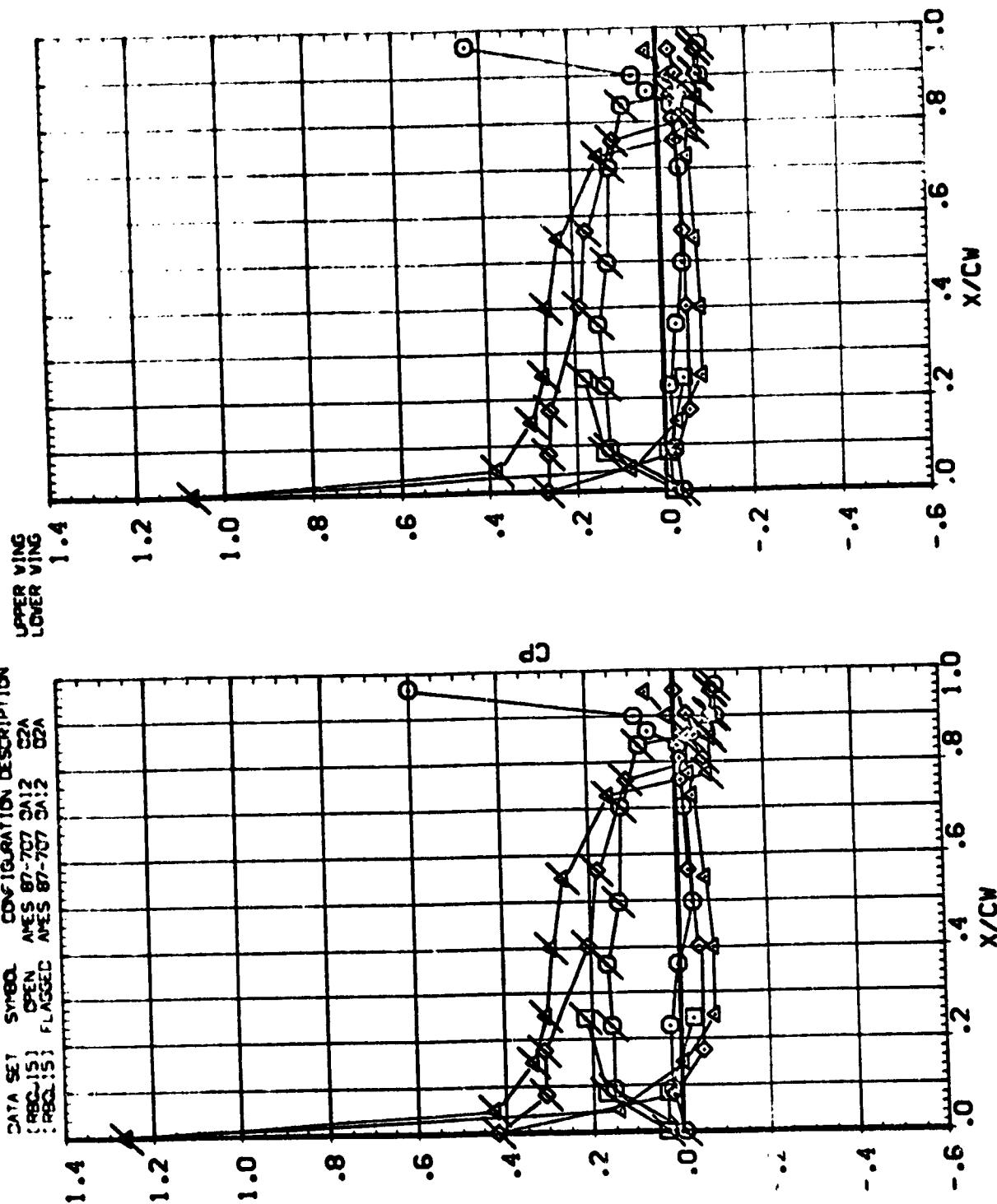


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA 12.000
 ELEVON 42.000
 PJOER 42.000
 PJOER 42.000

SYMBOL
 1/2B
 BETA
 MACH
 .759
 -6.750
 3.503
 .364
 -3.460
 .477
 .534

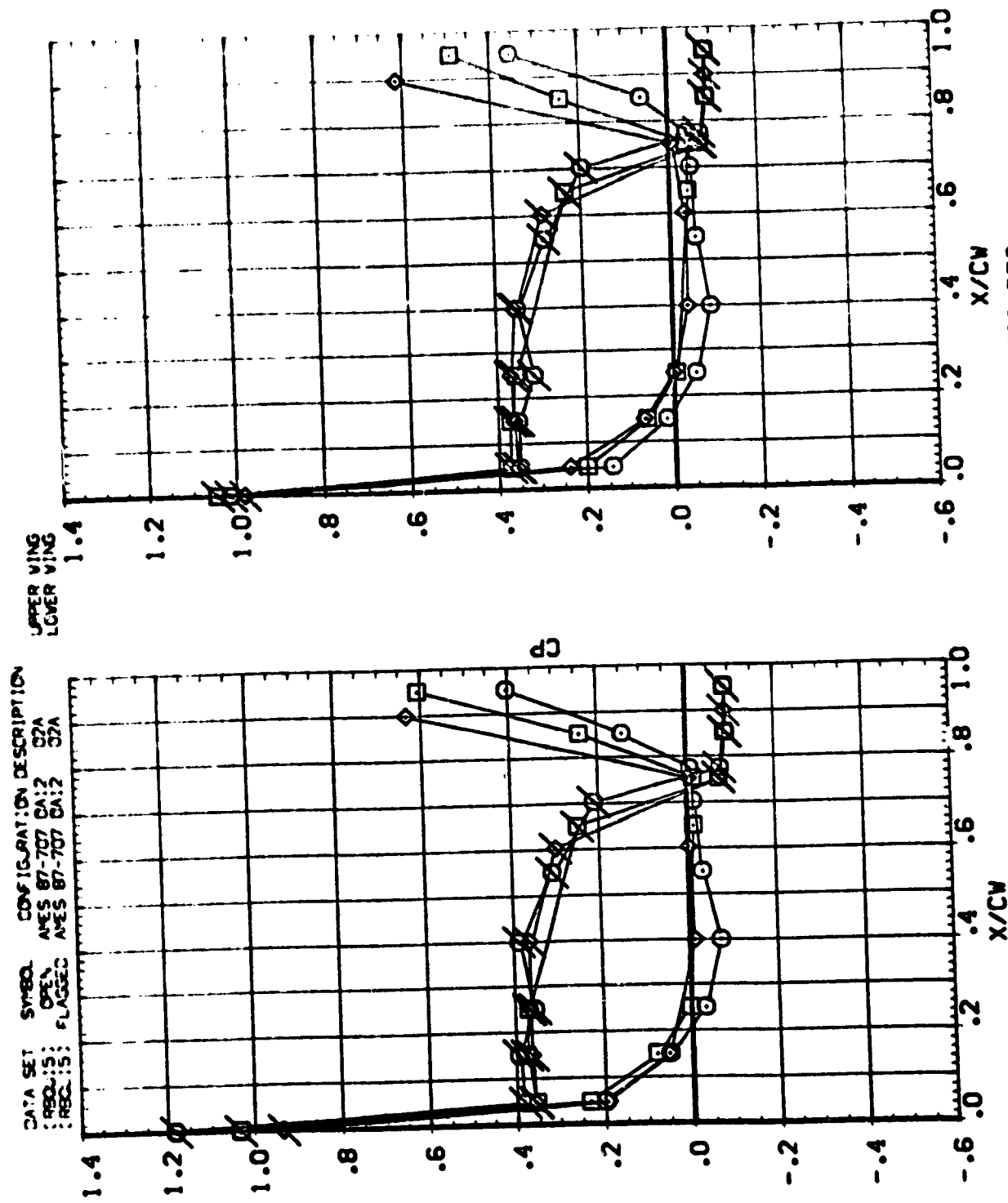
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RBC:15) OPEN AMES 87-707 CA:12 C2A
 (RBC:15) FLAGGED AMES 87-707 CA:12 C2A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

54146 010 10.53
 ALPHA 10.000 2.000 40.000
 ELEV 40.000 2.000 40.000

SYMB. V/BN BETA "AC" 3.523
 .673 -6.75C
 .78C -3.46C
 .887

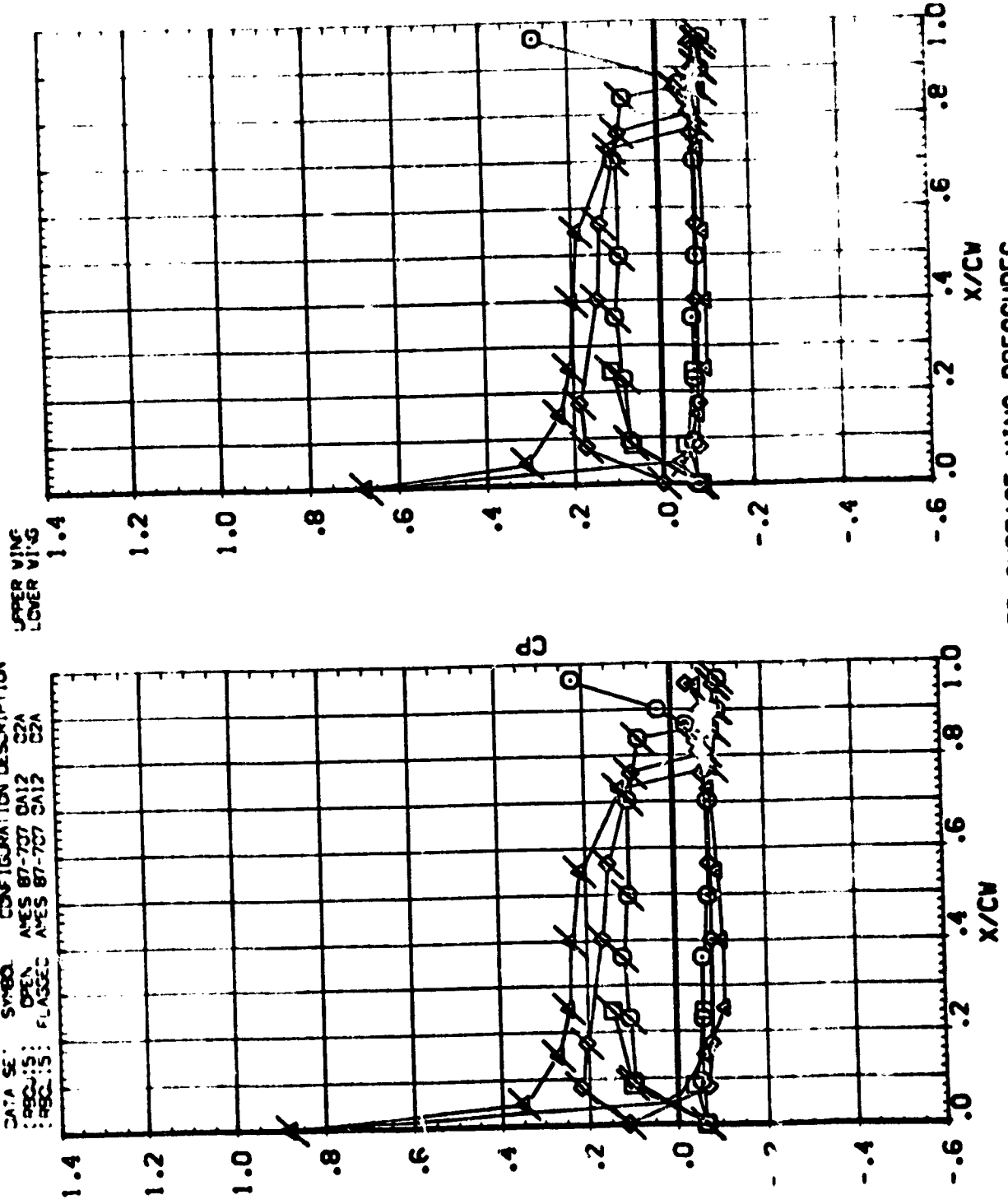


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA 10.000 20.000 30.000
 ELEVON 40.000 50.000 60.000

SYMBOL V/B₀ BETA MAC
 .789 .160 3.503
 .364 .160 3.503
 .427 .160 3.503
 .534 .160 3.503

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 .000 OPEN AYES 87-707 0A12 C2A
 .001 FLAGED AYES 87-707 0A12 C2A



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

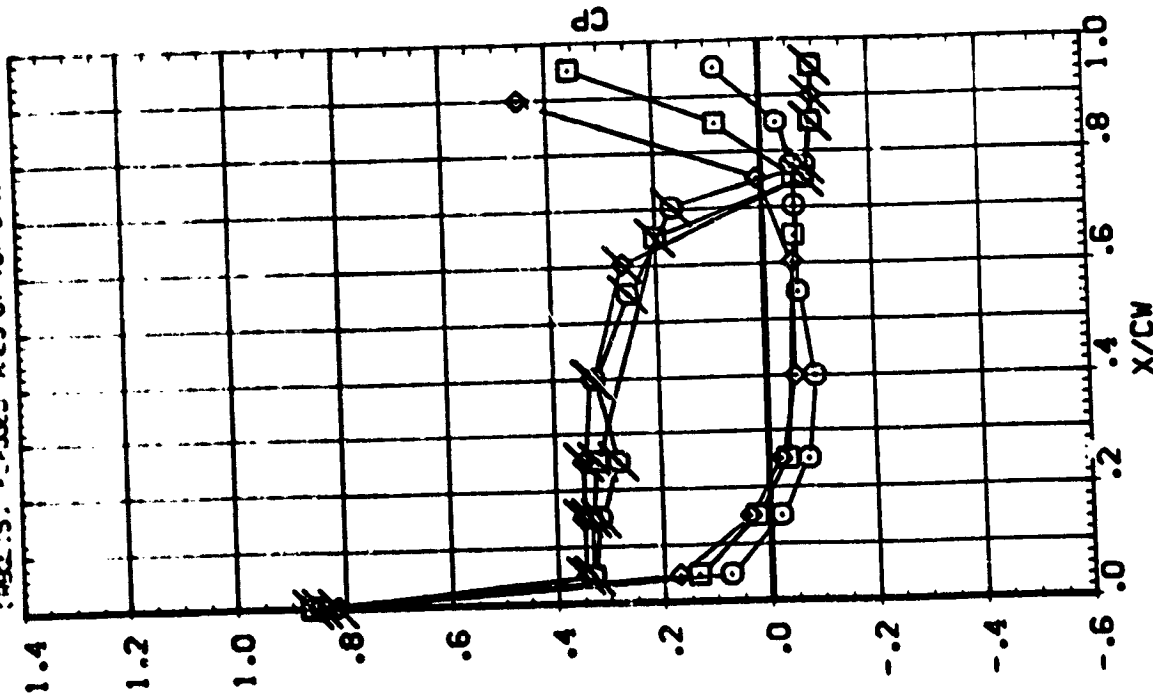
५५

133

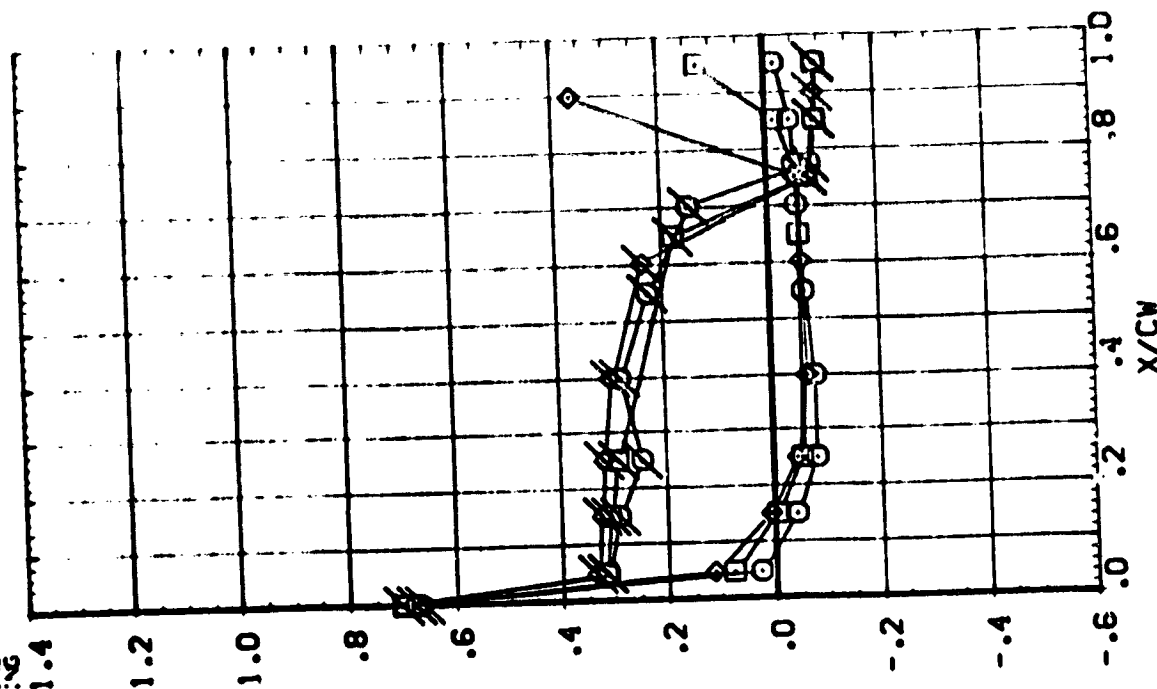
EX-A 3:30
-:60 3:50
MAC- 3:503

0110
2845
REV

DATA SE-	SUB	CONTRACT	DESCRIPTION
1980:5	5004	AVES 87-707	CA:2
1980:5	5004	AVES 87-707	CA:2



52:1 53:25



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 :0.000 RJOER
 -40.000 RJOER

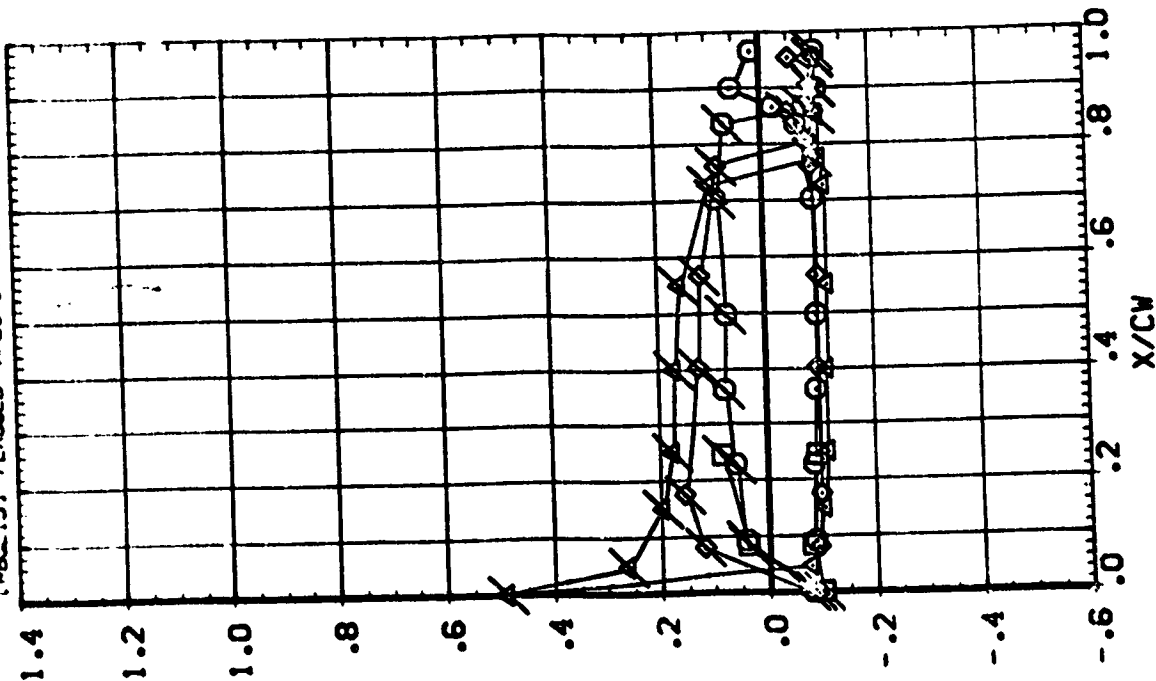
ALPHA
 ELEVON

BETA MACH
 6.430 3.503

SYMBOL Y/B₀
 .799
 .364
 .477
 .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 :RBOJ15 OPEN AMES 87-707 CA12 C2A
 :RBOJ15 FLAGGED AMES 87-707 CA12 C2A

UPPER WING
 LOWER WING



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

ALPHA
ELEVON

10.000
-10.000

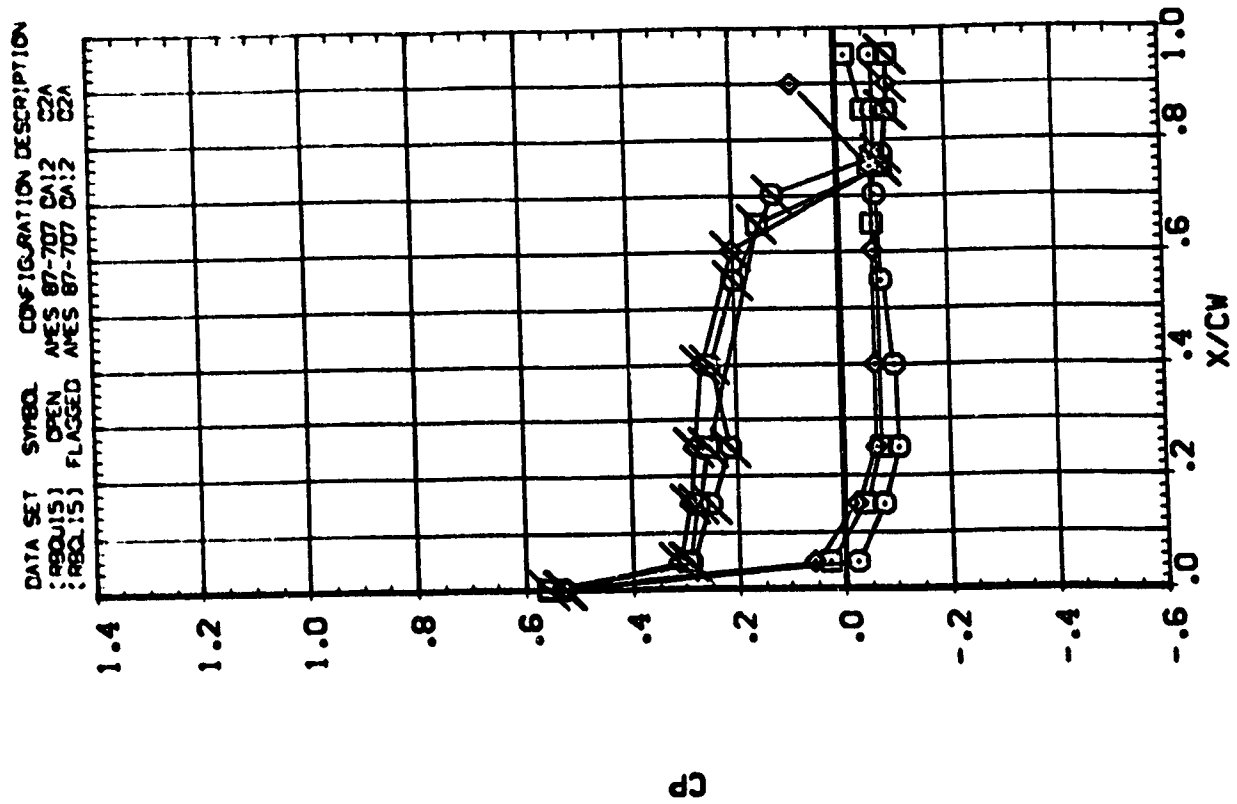
40.000
R.D.F. 2

SYMBOL
V/5V

6.430
3.503

.673
.78C
.887

UPPER WING
LOWER WING

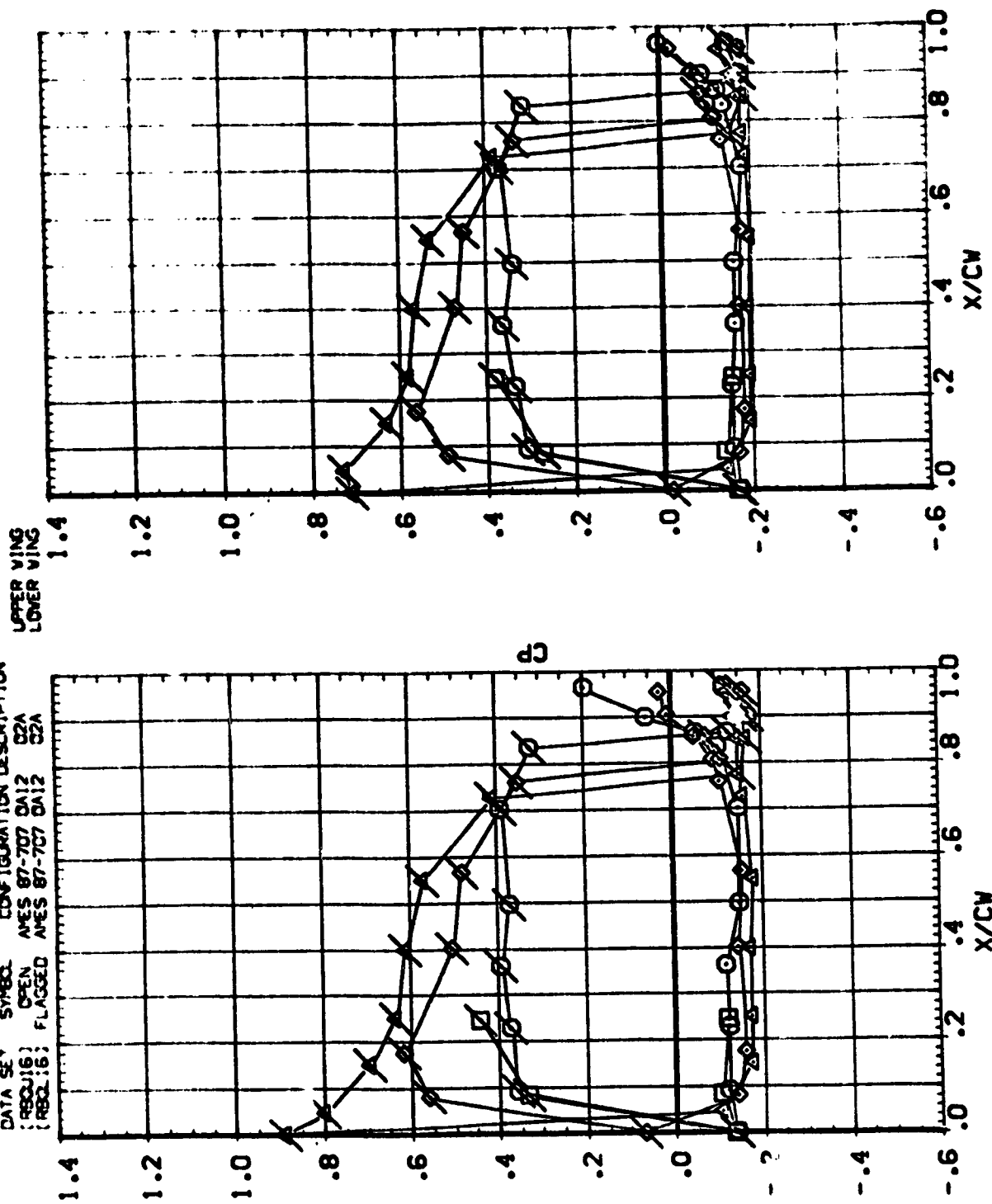


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

SYMBOL: α β γ δ ϵ ζ η θ ι κ λ μ ν ξ \omicron π ρ σ τ υ ϕ χ ψ ω
 ALPHA: 20.000 20.000 40.000
 ELEV: -40.000 40.000

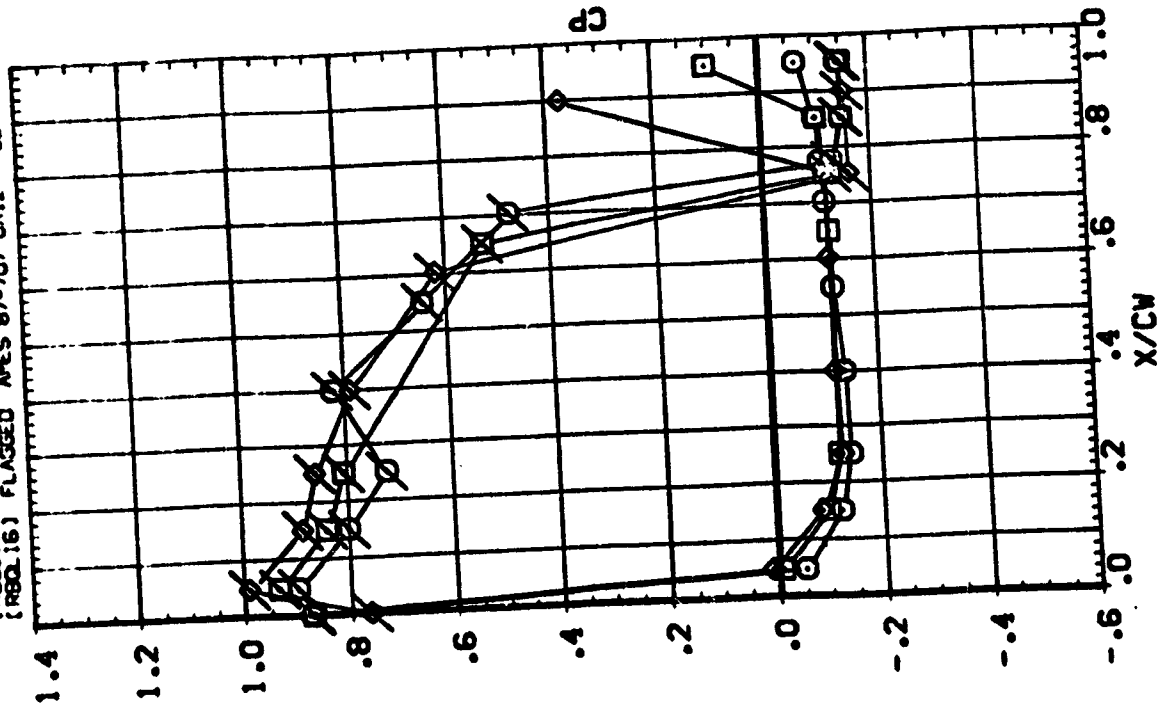
SYMBOL: α β γ δ ϵ ζ η θ ι κ λ μ ν ξ \omicron π ρ σ τ υ ϕ χ ψ ω
 BETA: -6.490 -3.320
 MACH: 2.498

DATA SET: SYMBOL: CONFIGURATION DESCRIPTION
 (REQ:16) OPEN: AVES 87-707 DA12 C2A
 (REQ:16) FLAGGED: AVES 87-707 DA12 C2A

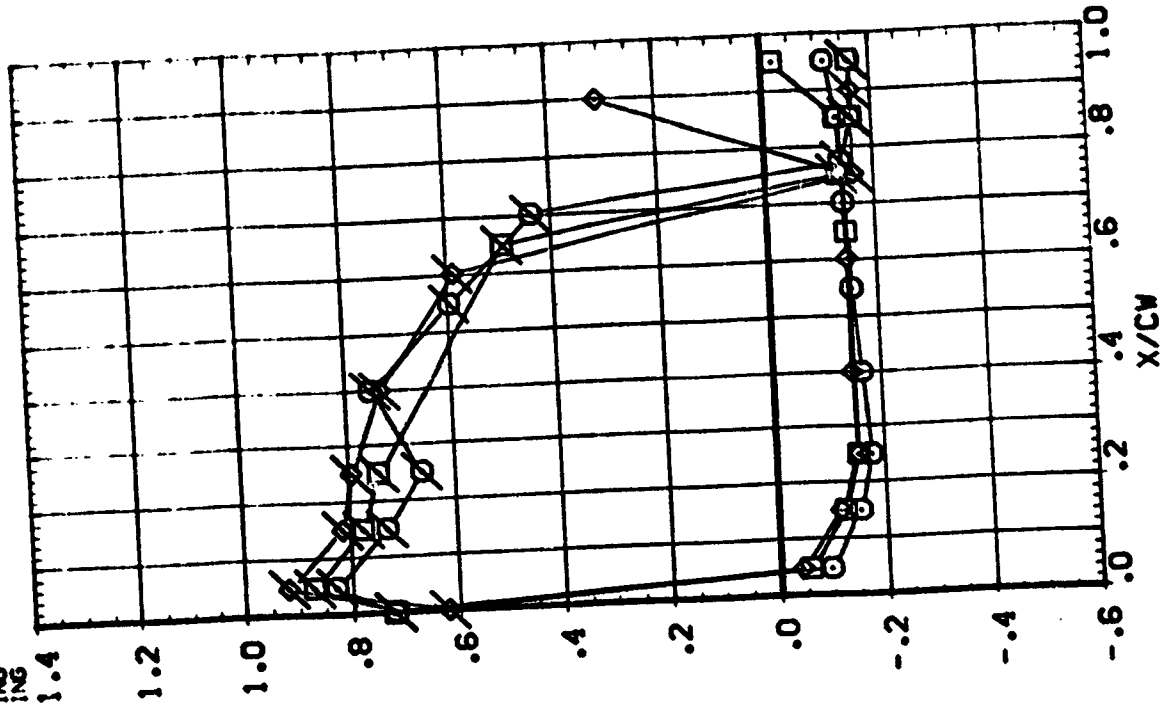


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [REQD] 87-707 0A12 02A
 [REQD] 87-707 0A12 02A



UPPER WING
 LOWER WING



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

SYMBOL
 ○ □ △

V/30
 .299
 .364
 .427
 .534

BETA
 -.160
 3.040

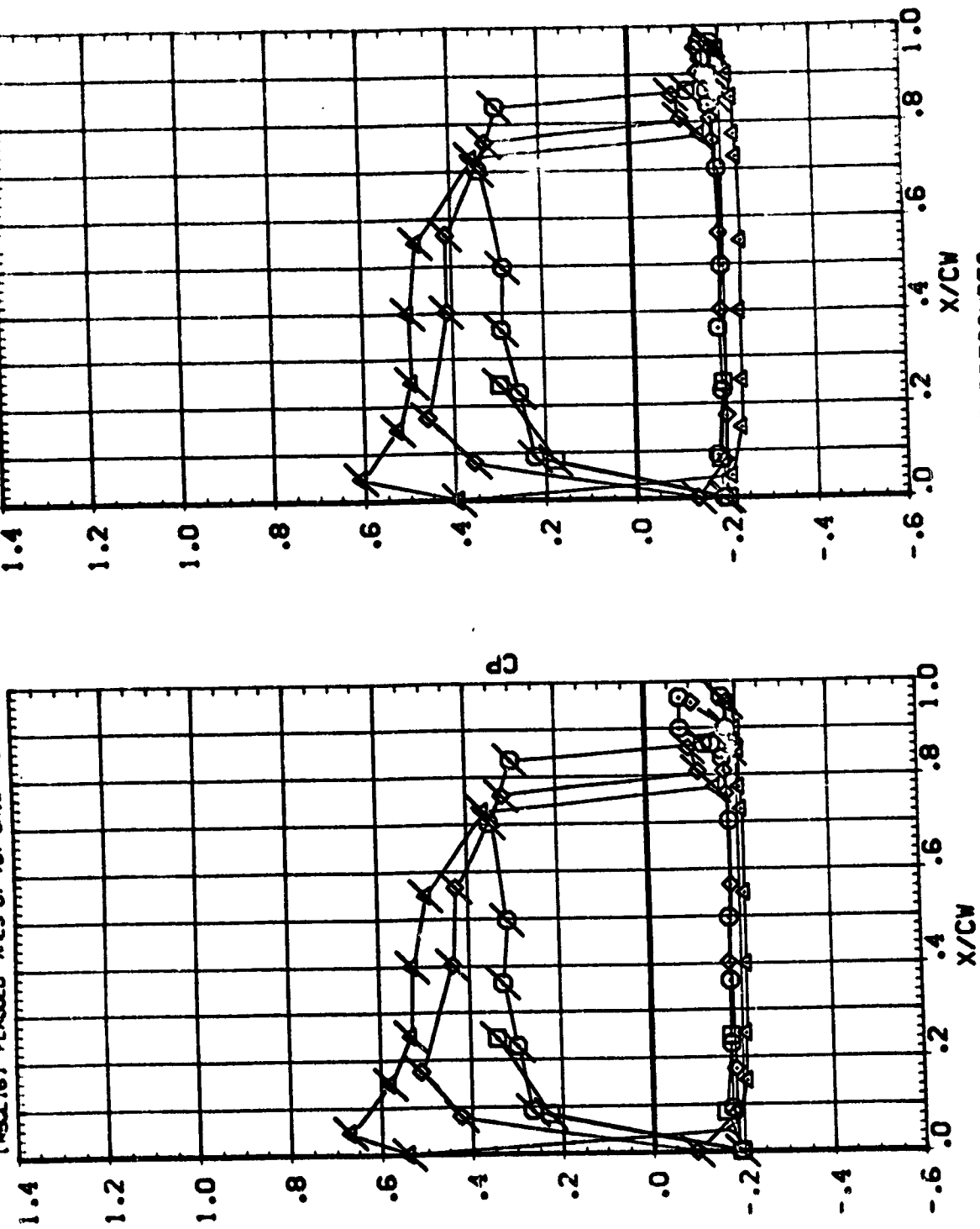
MACH
 2.498

PARAMETRIC VALUES
 ALPHA 20.000 RDOOR
 ELEVON -45.000 RDOFLR

.000
 40.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REQ.16) OPEN ANES 87-707 DA12 C2A
 (REQ.16) FLAGGED ANES 87-707 DA12 C2A

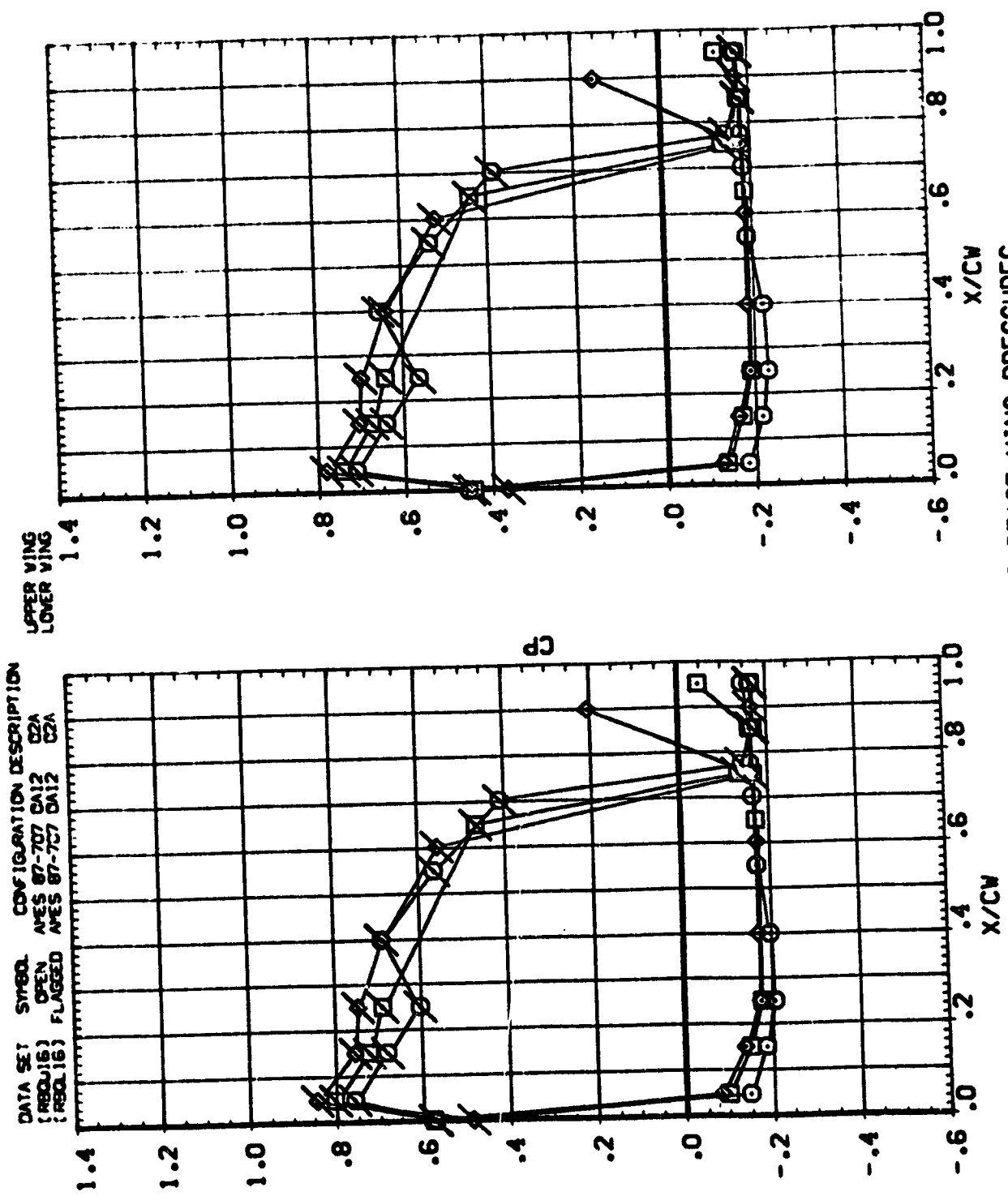
UPPER WING
 LOWER WING



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETRIC VALUES
 ALPHA 20.000
 ELEVON -40.000
 RUDDER .000
 RUFLR 40.000

SYMBOL V/BN BETA MACH
 .573 .160 2.498
 .780 3.040
 .887

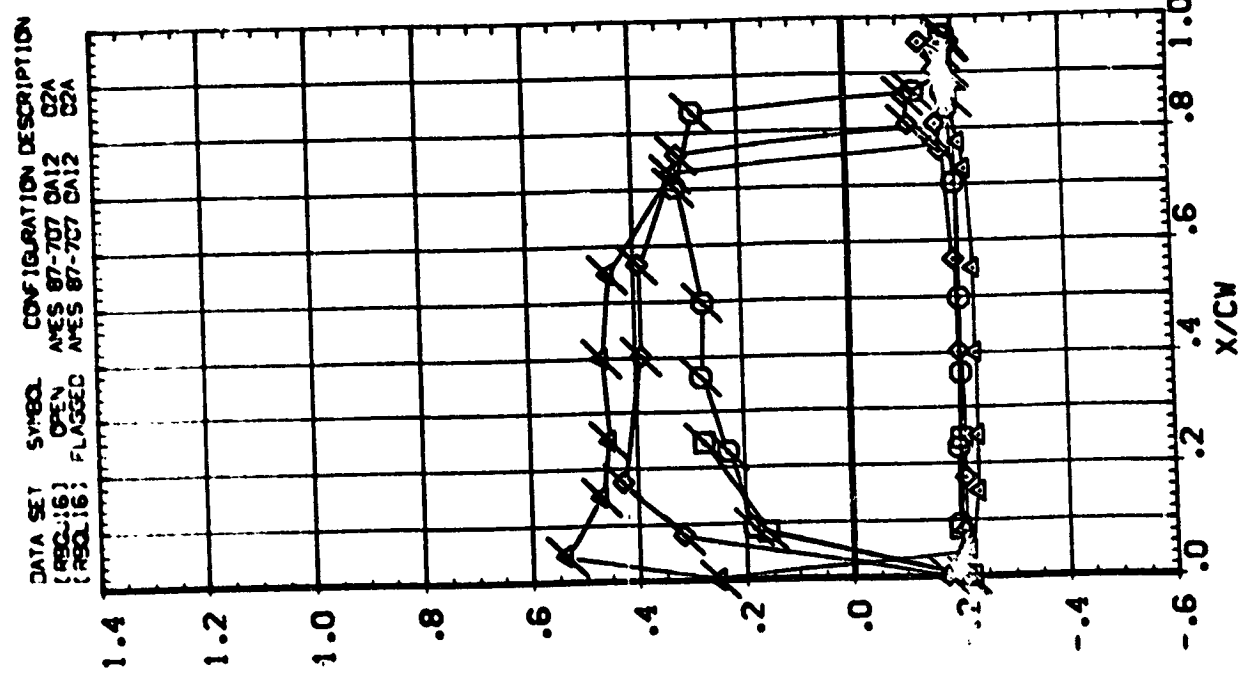


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

PARAMETER VALUES
 75.000 8.000 40.000
 ALPHA 2.000
 ELEVATION

SYMBOL Y/BETA WAC
 .299 5.240 2.498
 .364
 .477
 .534

UPPER WING
 LOWER WING

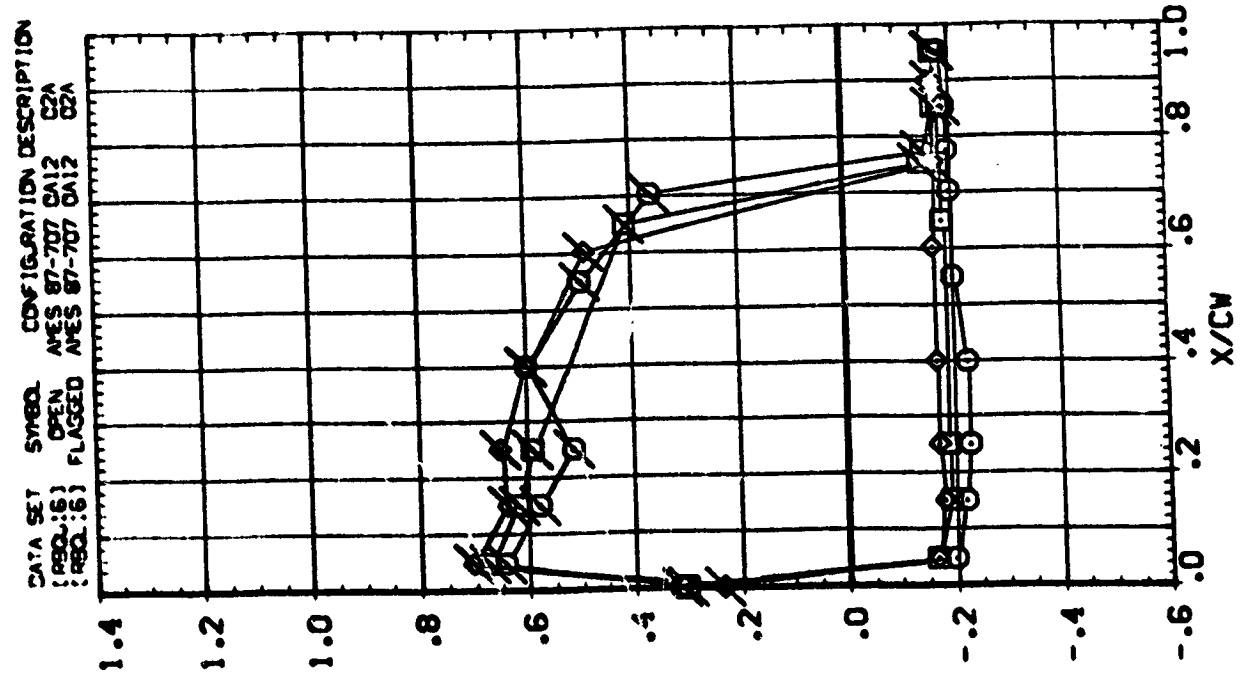


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

ELEVON
 -45.000
 45.000
 R.D.F. R

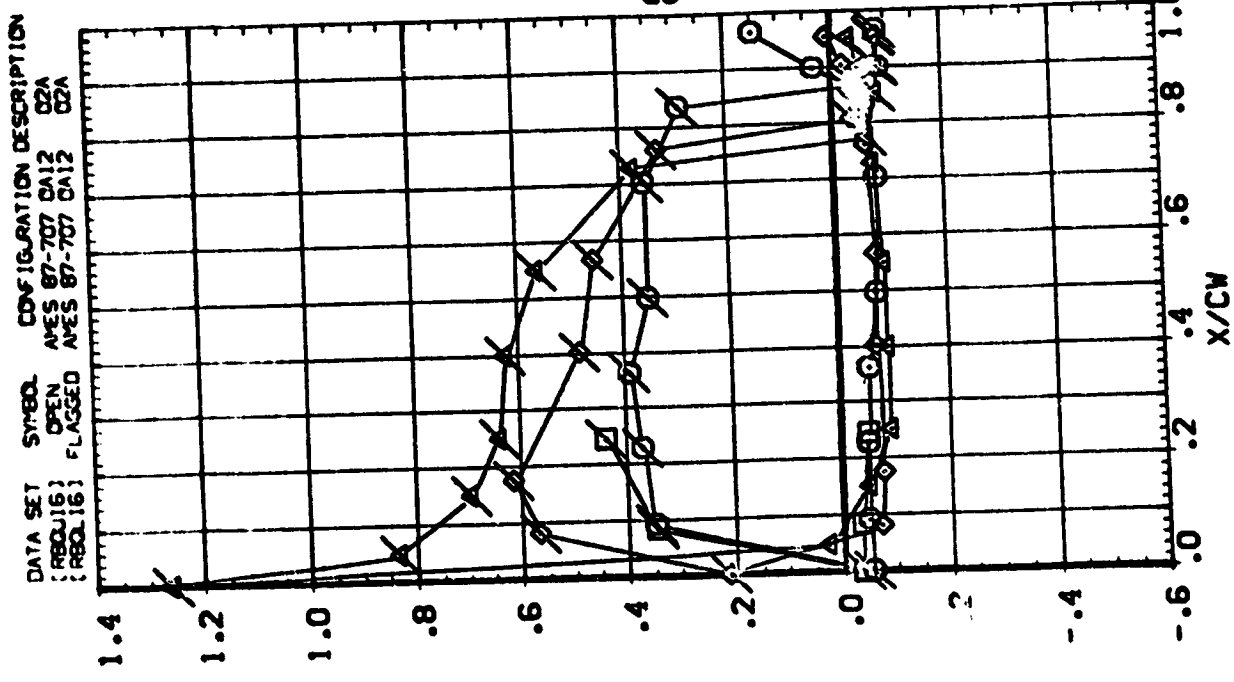
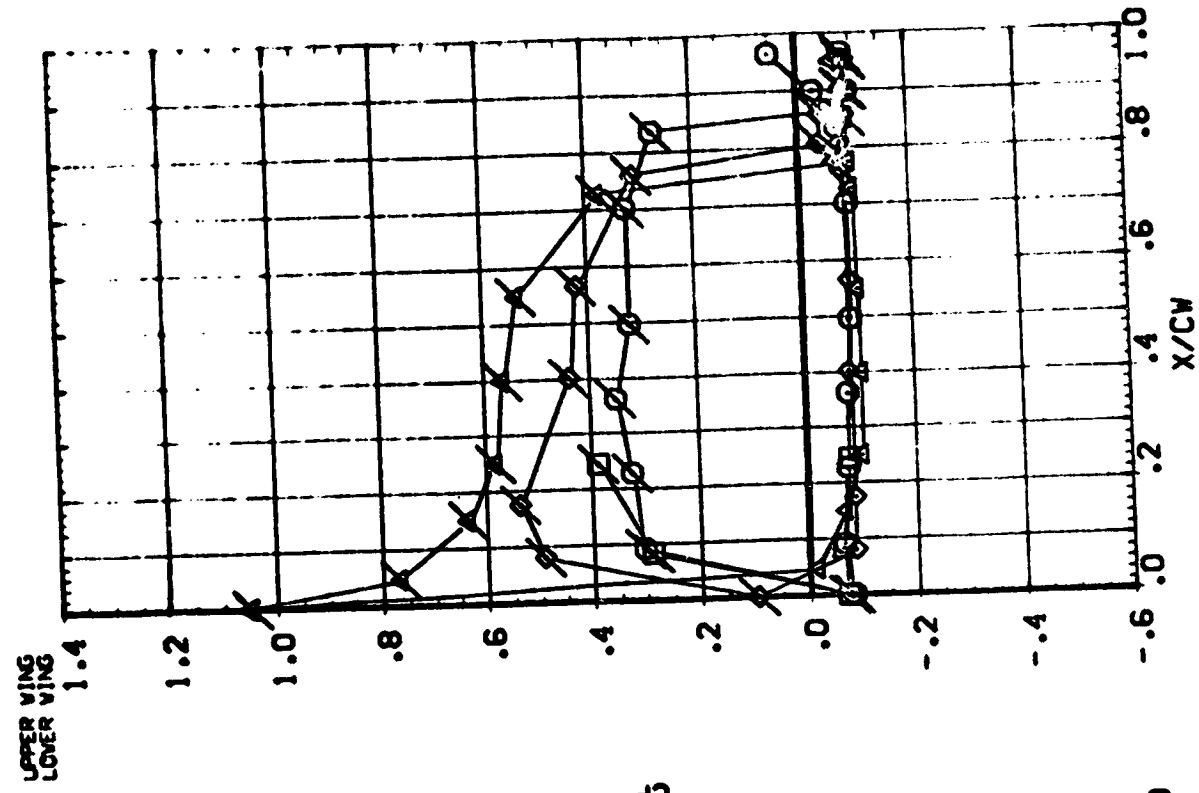
SYMBOL
 1/50
 .673
 .78C
 .887
 6.240
 2.499

UPPER WING
 LOWER WING



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

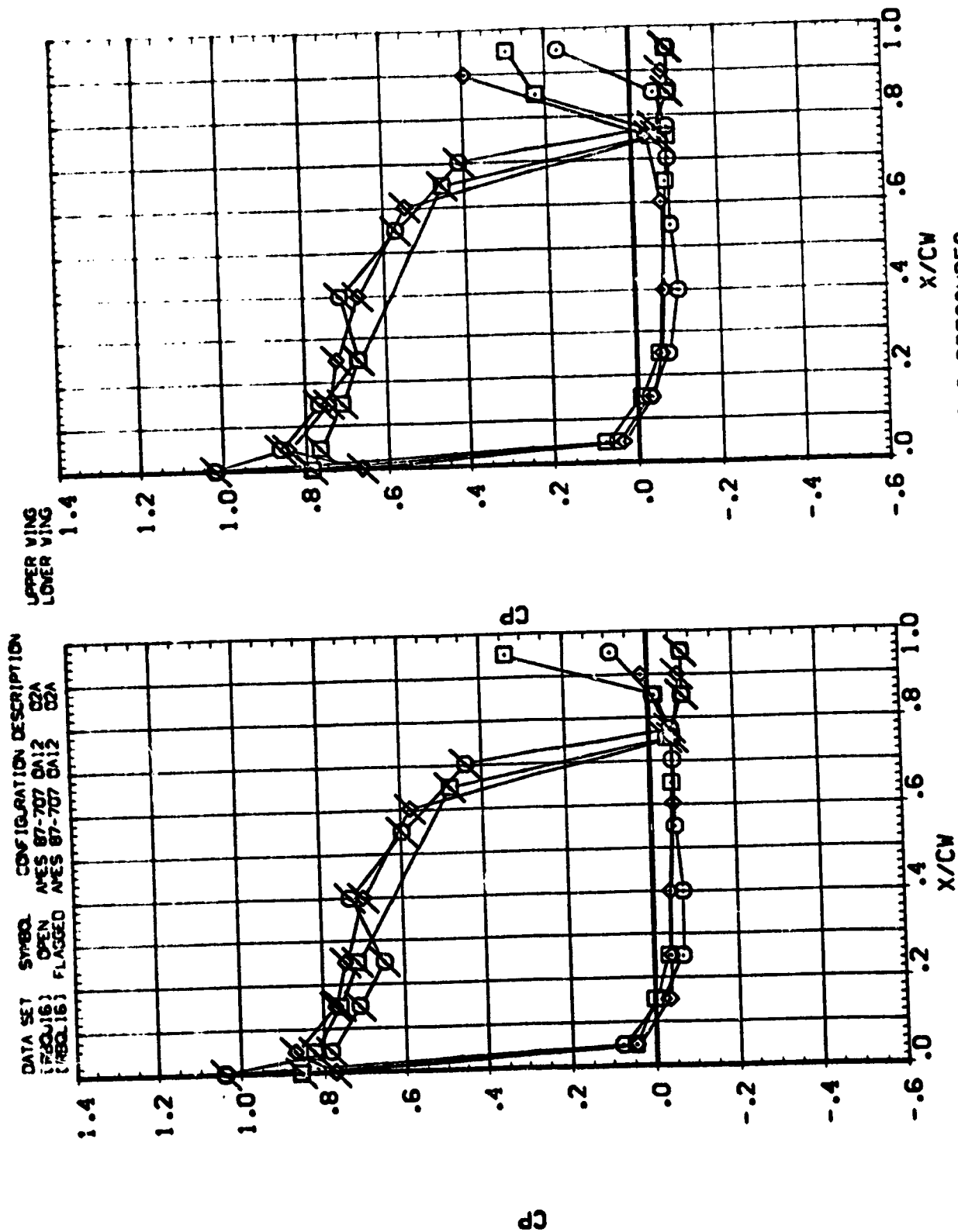
PARAMETER VALUES
 ALPHA 70.000
 ELEVATION -45.000
 RADIUS 0.000
 RADIUS 45.000



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [REQ16] OPEN AVES 87-707 CA12 OZA
 [REQ16] FLAGGED AVES 87-707 CA12 OZA

SYMBOL Y/BV BETA MACH
 799 -6.720 3.503
 364 -3.440
 427
 534

CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

SYMBOL
○ ○ ○ ○ △

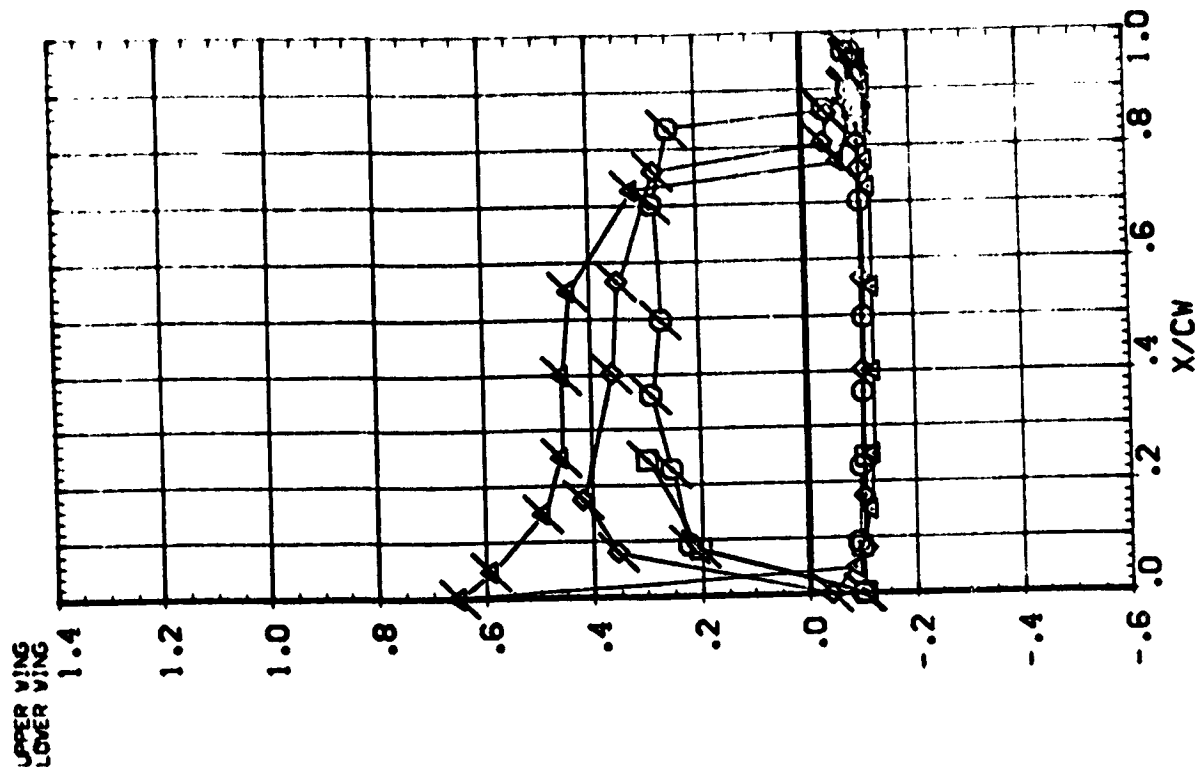
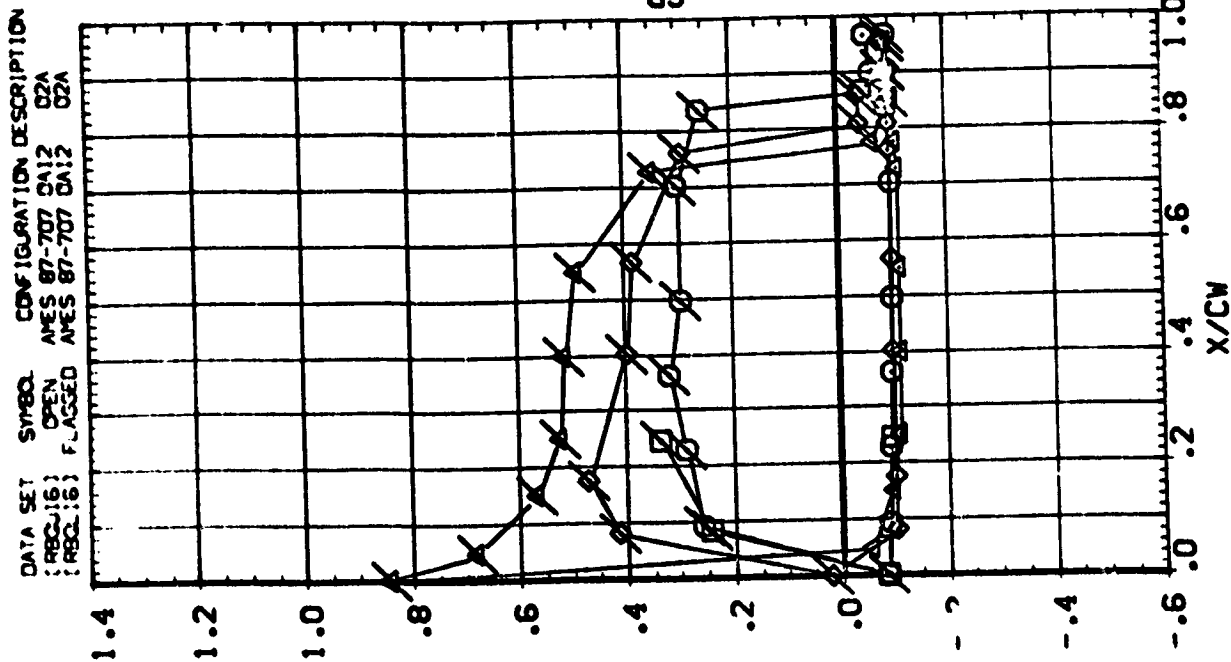
V/BV
.299
.364
.427
.534

BETA
-1.60
3.150

WAC-
3.503

PARAMETRIC VALUES
ALPHA 20.000 R.000
ELEVON -40.000 R.000 R

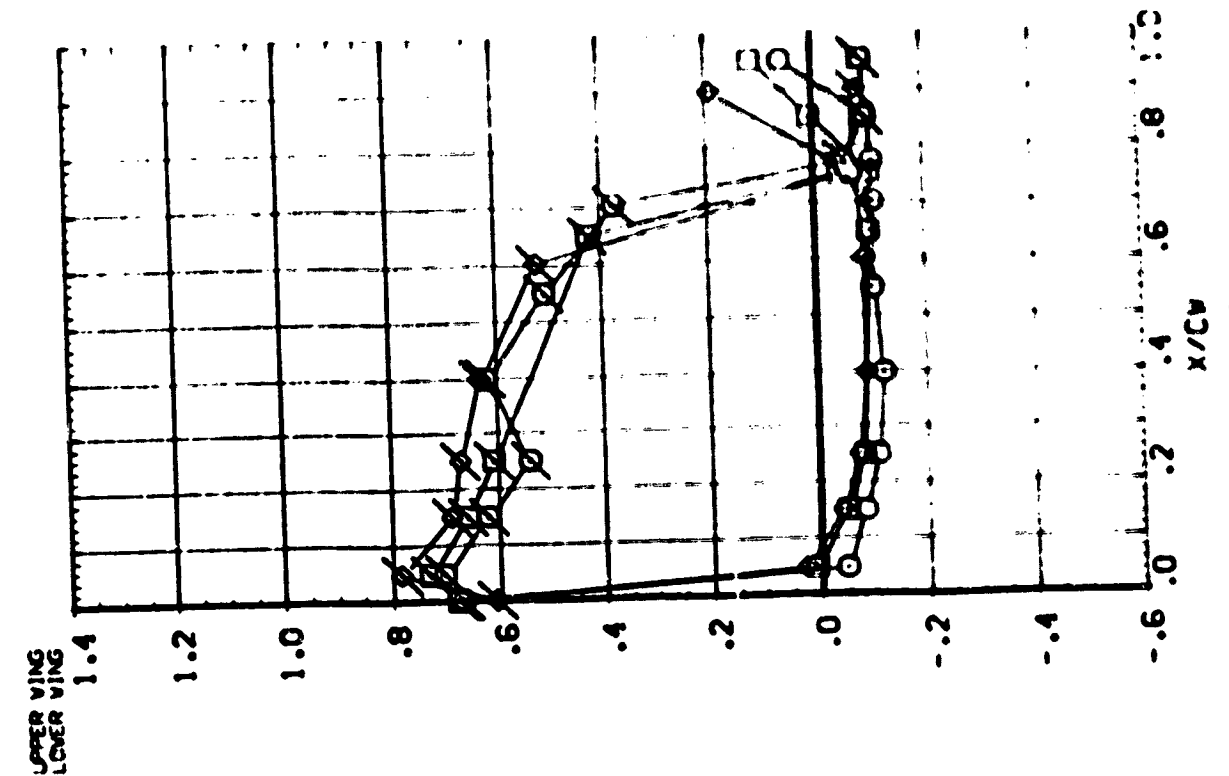
.000
40.000



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

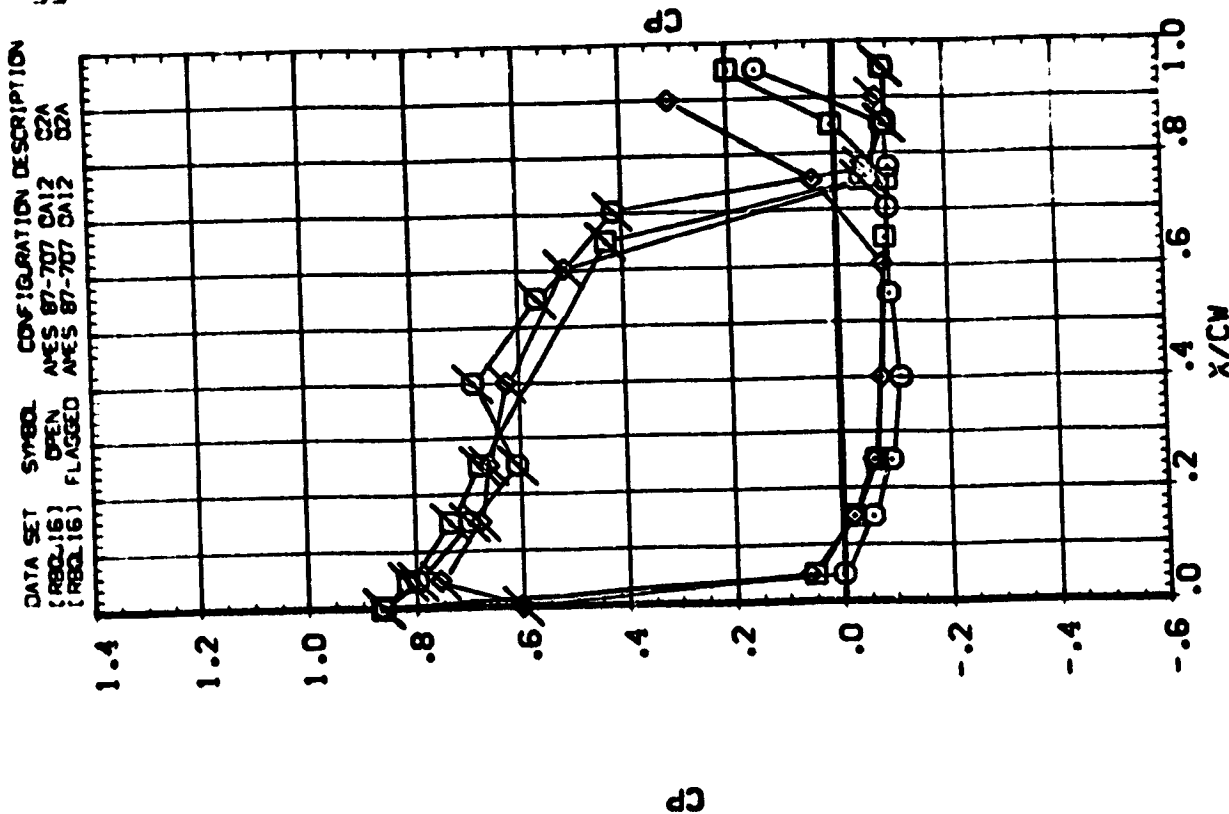
PARAMETRIC VALUES

ALPHA	20.000	RUDDER	.000
ELEVON	-40.000	RUDLER	40.000



SYMBOL Y/BN BETA MACH

○	.673	-.160	3.503
□	.780	3.150	
◇	.887		



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

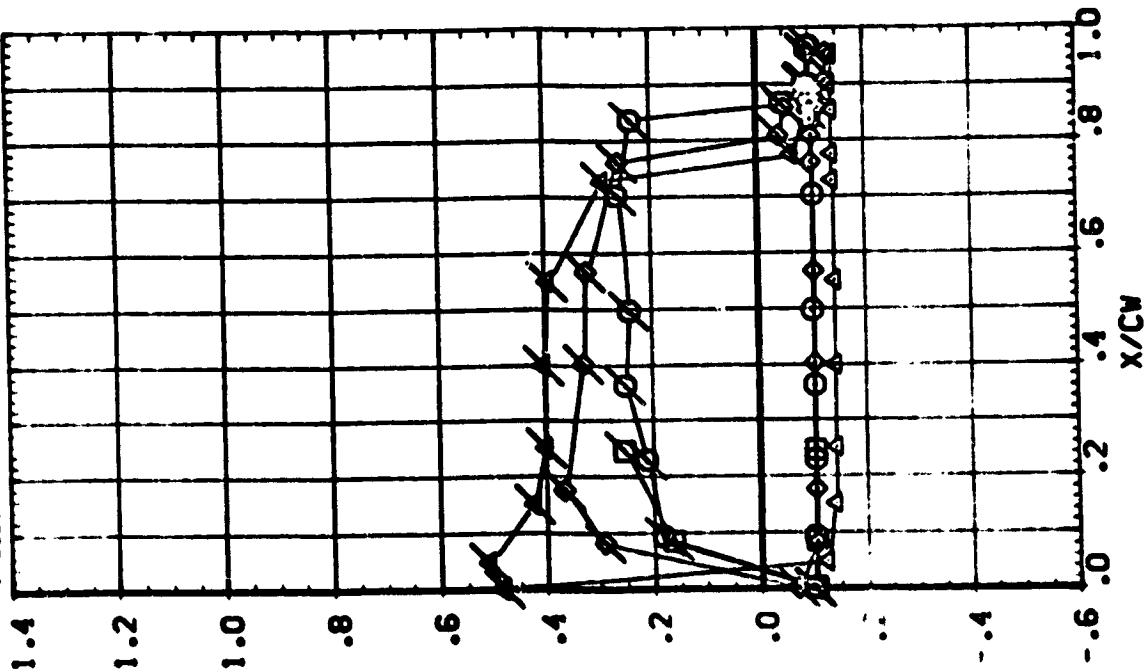
SYMBOL V/BV .299
 .364
 .427
 .534

BETA 6.47C MACH 3.503

PARAMETRIC VALUES
 ALPHA 79.000
 ELEVON 45.000
 P.D. 0.000
 P.D. 0.000
 P.D. 0.000

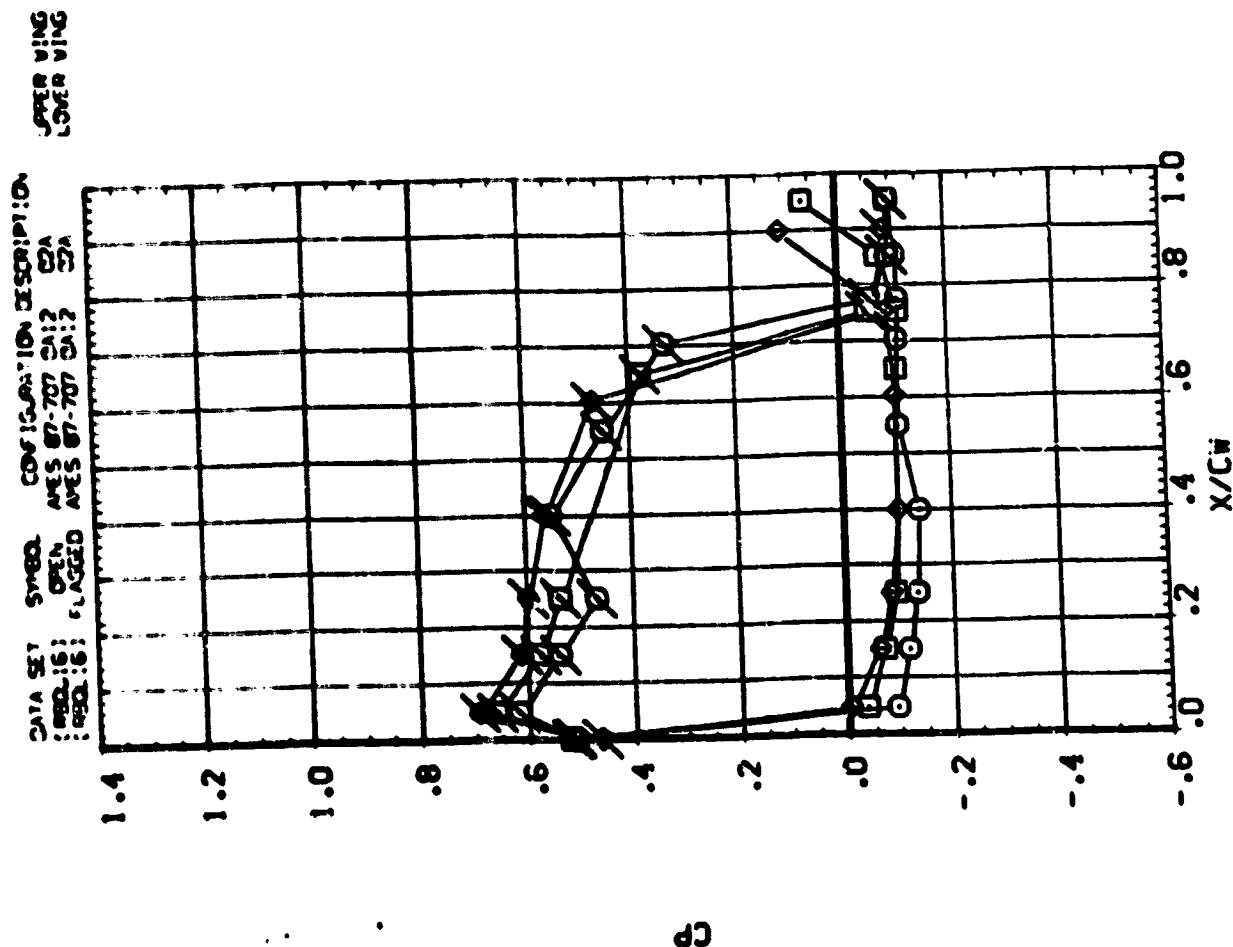
DATA SET: SYMBOL CONFIGURATION DESCRIPTION
 (R00116) OPEN ANES 87-707 DAI12 OZA
 (R00116) FLAGGED ANES 87-707 DAI12 OZA

UPPER WING
 LOWER WING



CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

Symbol	Value	Unit
SWR	1.573	
SWR	1.70C	
SWR	1.887	
SWR	6.475	
SWR	3.523	

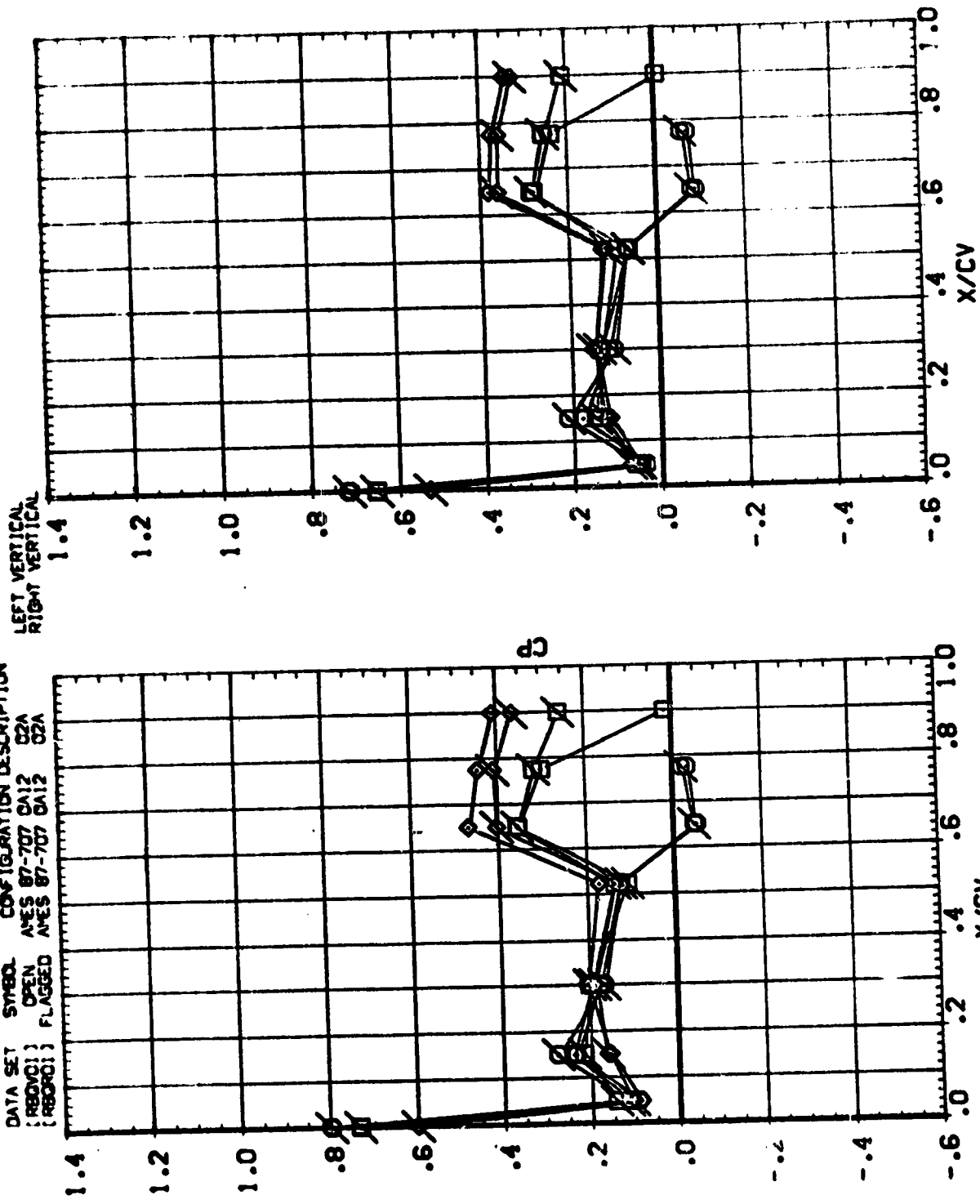


CHORDWISE DISTRIBUTION OF UPPER AND LOWER SURFACE WING PRESSURES

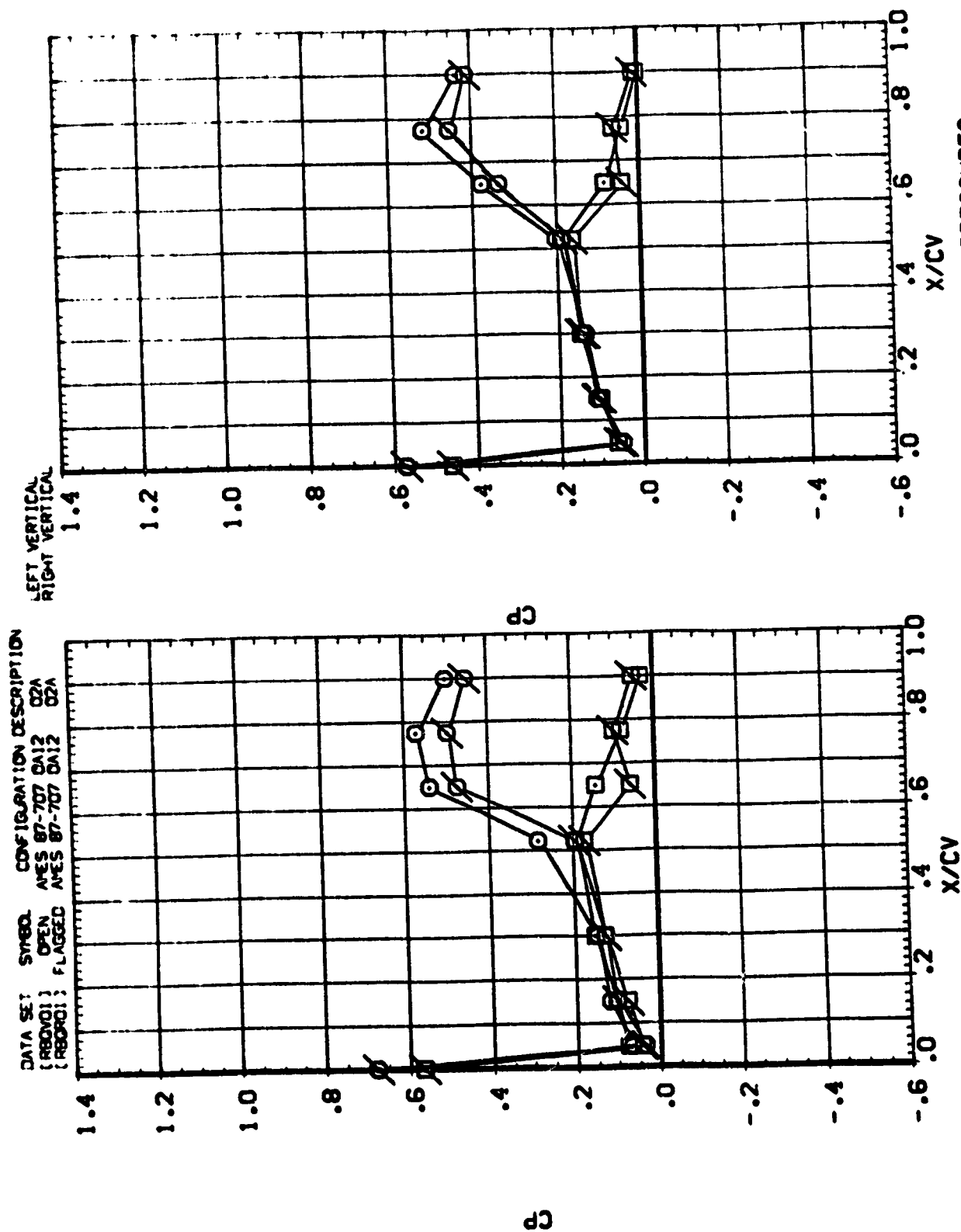
PARAMETRIC VALUES
 BETA .000
 ELEVON .000
 RUDDER .000
 RUDFLR 40.000

SYMBOL Z/BV ALPHA MACH
 .158
 .316
 .600
 -.080 2.498
 4.95C

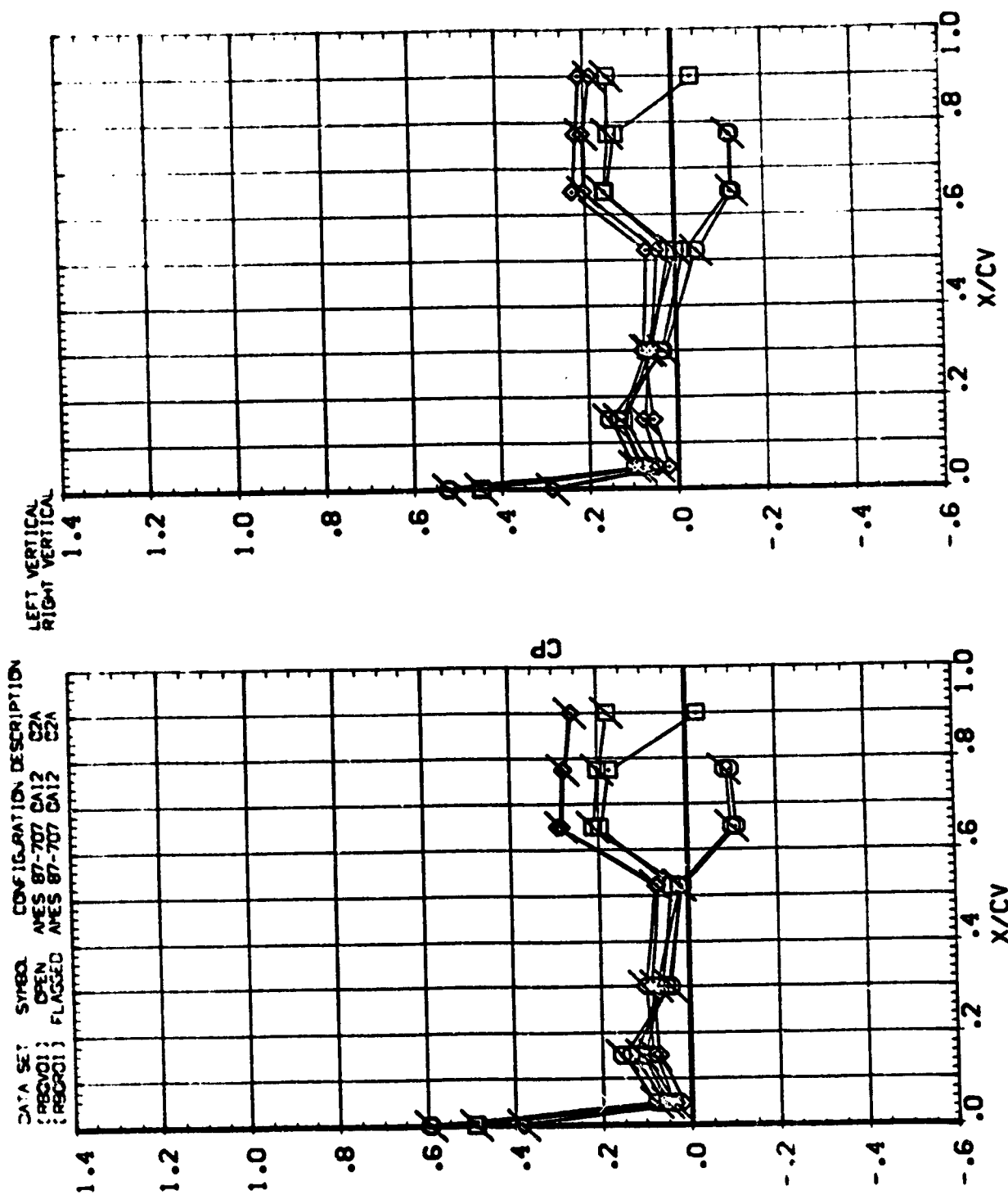
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [REBOVC] OPEN AYES 87-707 CA12 C2A
 [REBOVC] FLAGGED AYES 87-707 CA12 C2A



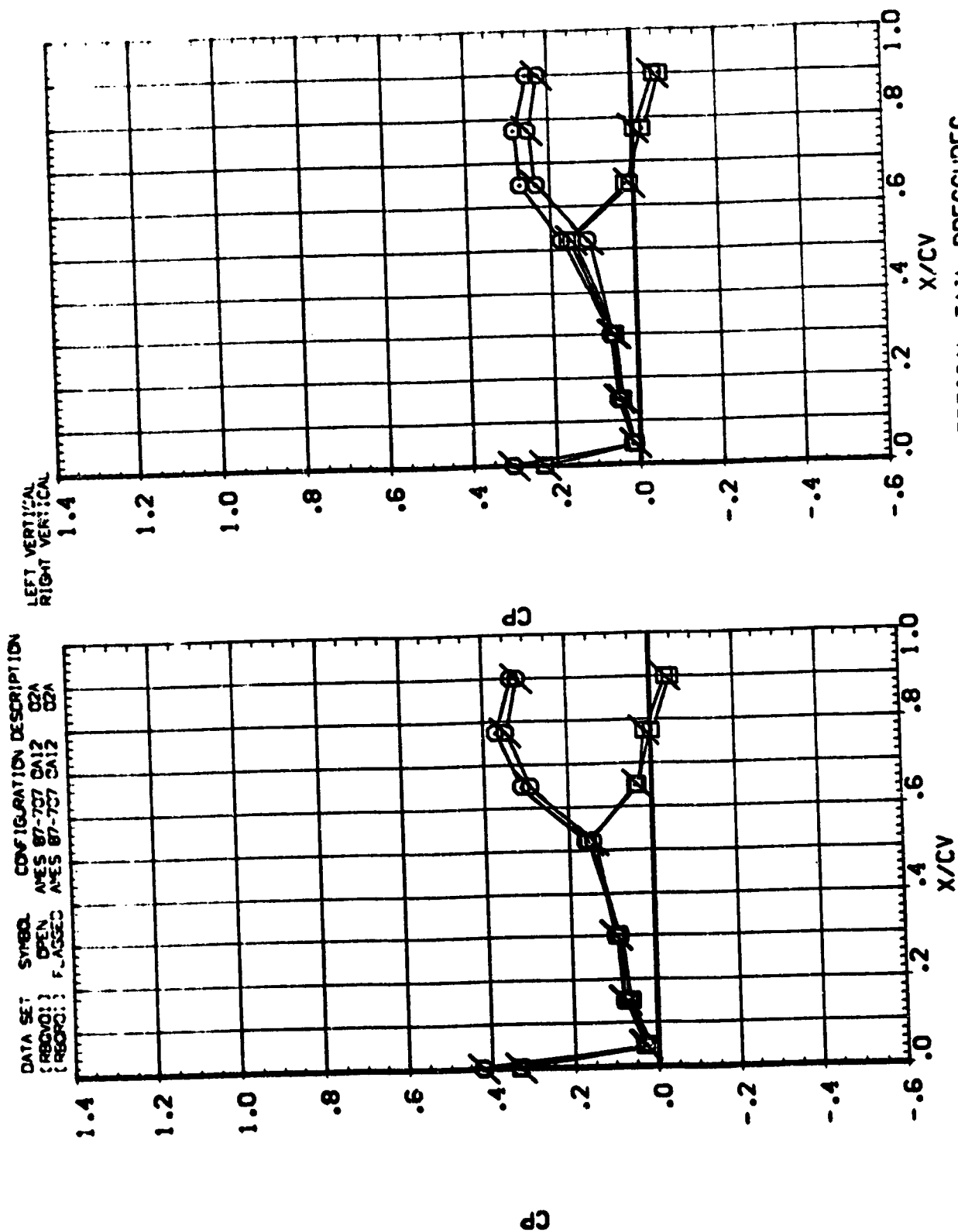
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES		PAGE	
X/CV			



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES		PAGE	
X/CV			

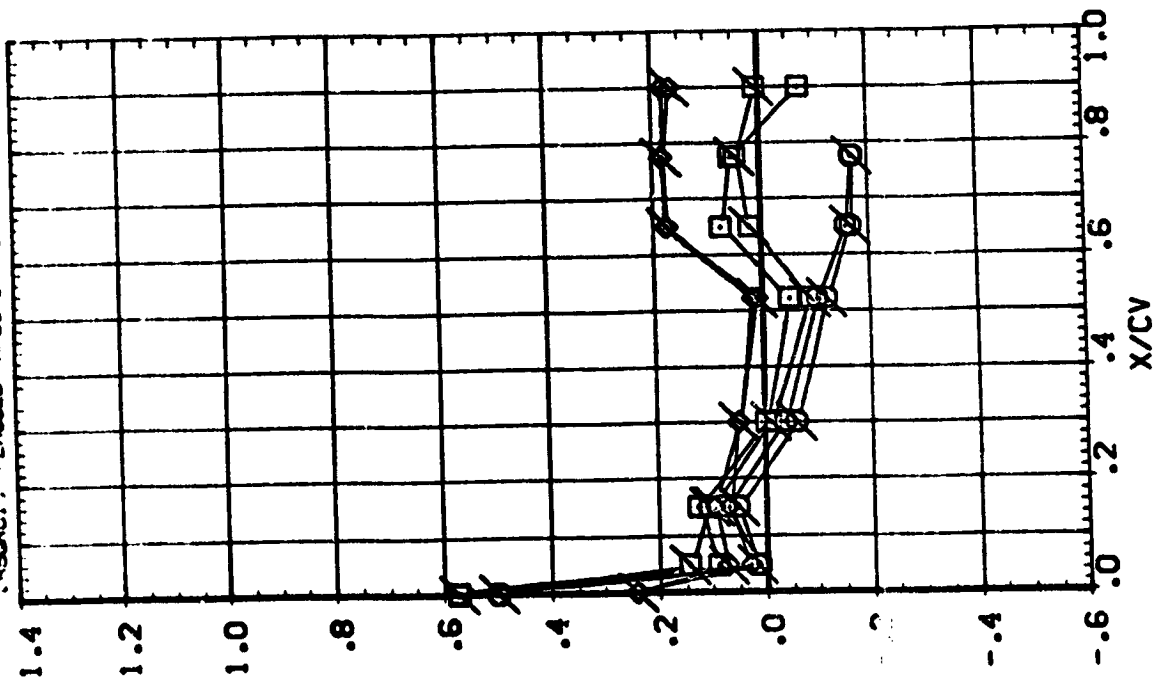
BEVA
ELEVON

A. P. A. MACH 2.498
:9.87C

08:5
08:7

DATA SET	SYMBOL	CONFIGURATION	DESCRIPTION
(RBCVOL)	OPEN	AMES 87-707	CA:2 O2A
(RBCRO)	FLAGGED	AMES 87-707	CA:2 O2A

LEFT VERTICAL
RIGHT VERTICAL



X/CV		CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES		PAGE

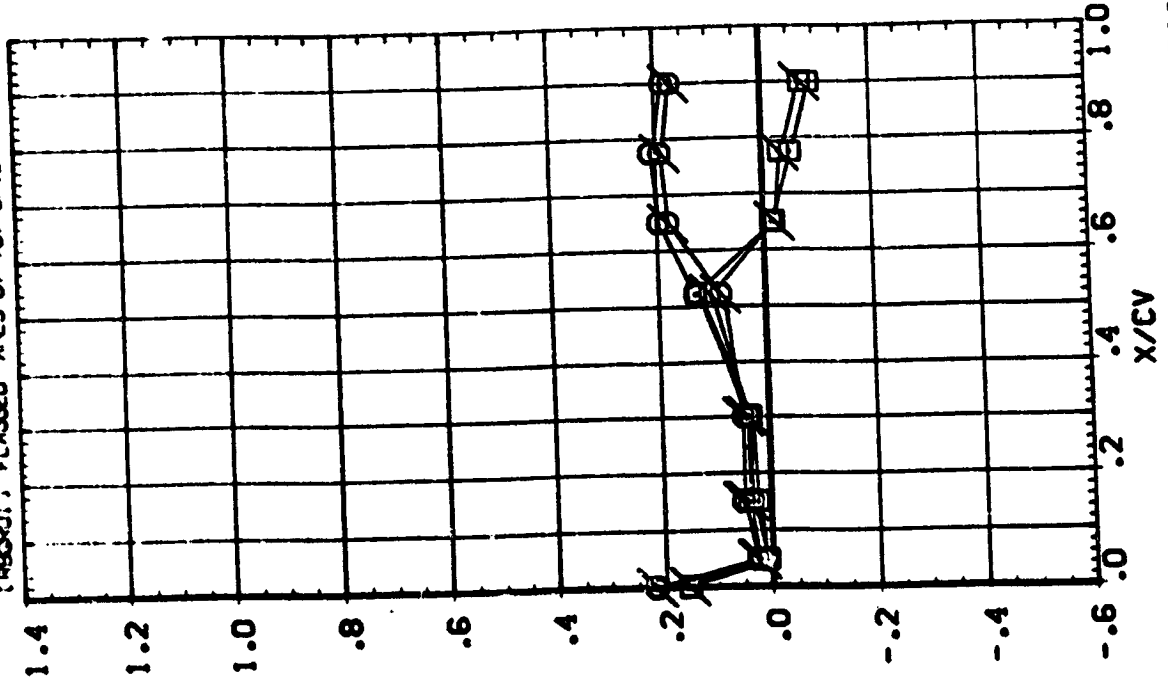
PARAMETRIC VALUES
 .000 .000 .000
 .000 .000 .000
 .000 .000 .000

BETA
 ELEVON

SYMBOL Z/BY ALPHA MACH
 .04C 2.498
 .925

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RBCVCI) OPEN AMES 87-707 CA12 Q2A
 (RBCVCI) FLAGGED AMES 87-707 CA12 Q2A

LEFT VERTICAL
 RIGHT VERTICAL

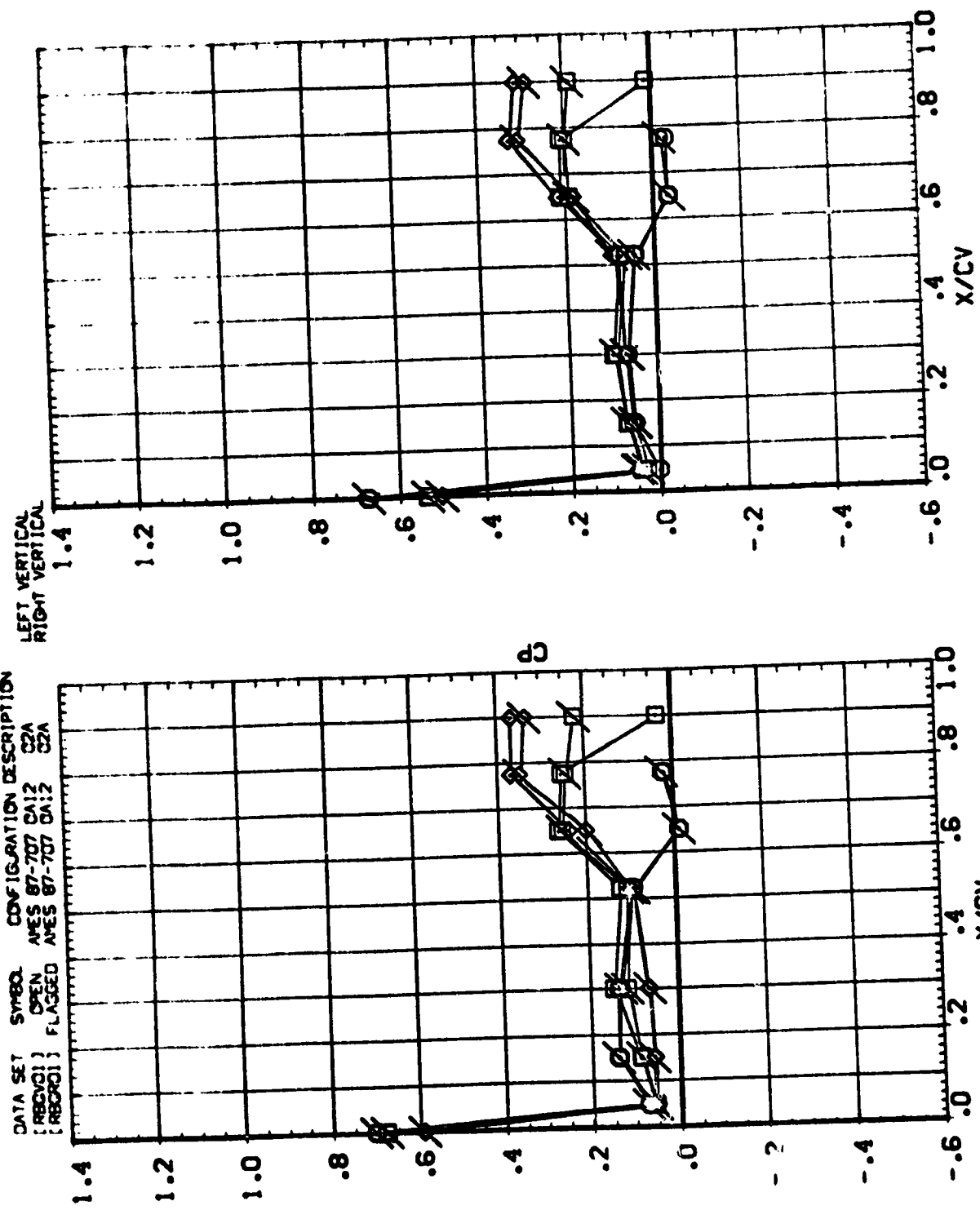


CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 BETA .000 RUDER .000
 ELEVON .000 RUDER 40.000

ALPHA .020 WACH 3.502
 .158
 .316
 .500

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 [RECORD] OPEN AYES 87-707 DA:2 C2A
 [RECORD] FLAGGED AYES 87-707 DA:2 C2A



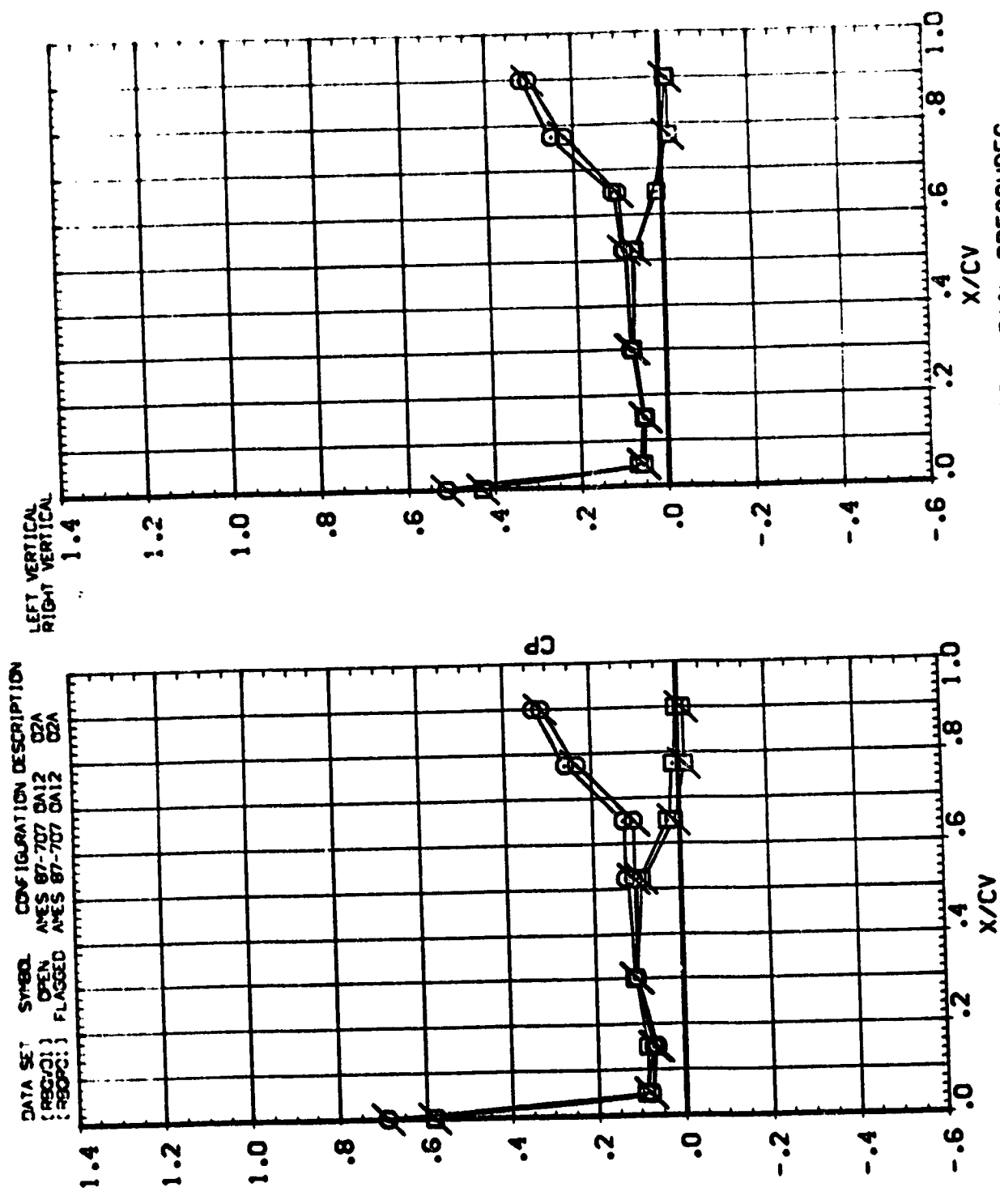
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 .000 RUDER .000
 .000 RUDDER 40.000

BETA
 ELEVON

SYMBOL Z/B/ A/DMA MACH
 .04C .02C 3.502
 .925 5.17C

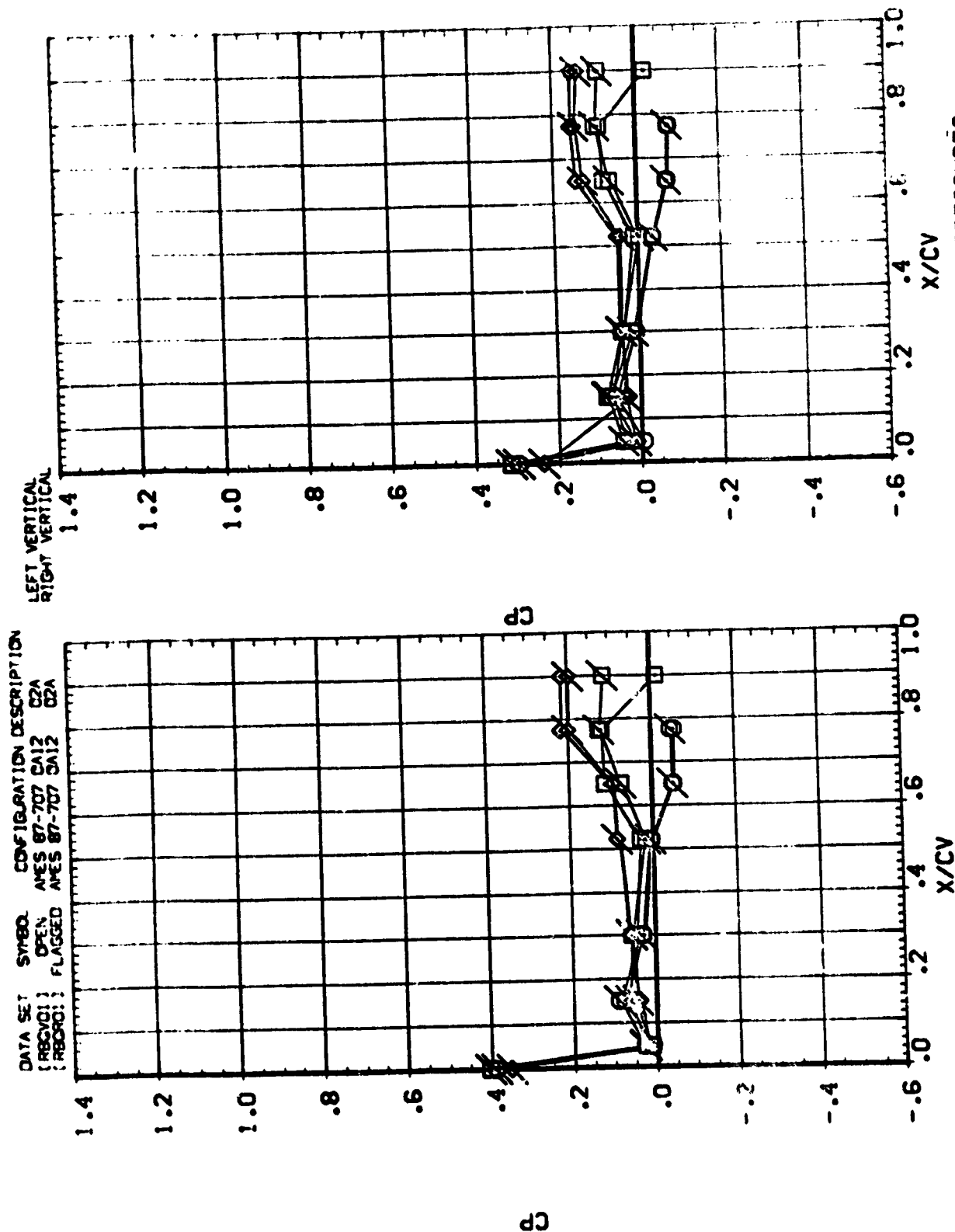
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RUC/DI) OPEN AYES 87-707 DA12 ODA
 (RUC/DI) FLAGGED AYES 87-707 DA12 ODA



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

SYNCH	7/2V	ALPHA	MACH
()	.158	10.130	3.502

DATA SET	SYMBOL	CONFIGURATION	DESCRIPTION
[RBCVO1]	OPEN	AMES 87-707	CA12 C2A
[RBCRO1]	FLAGGED	AMES 87-707	SA12 C2A



LAWA

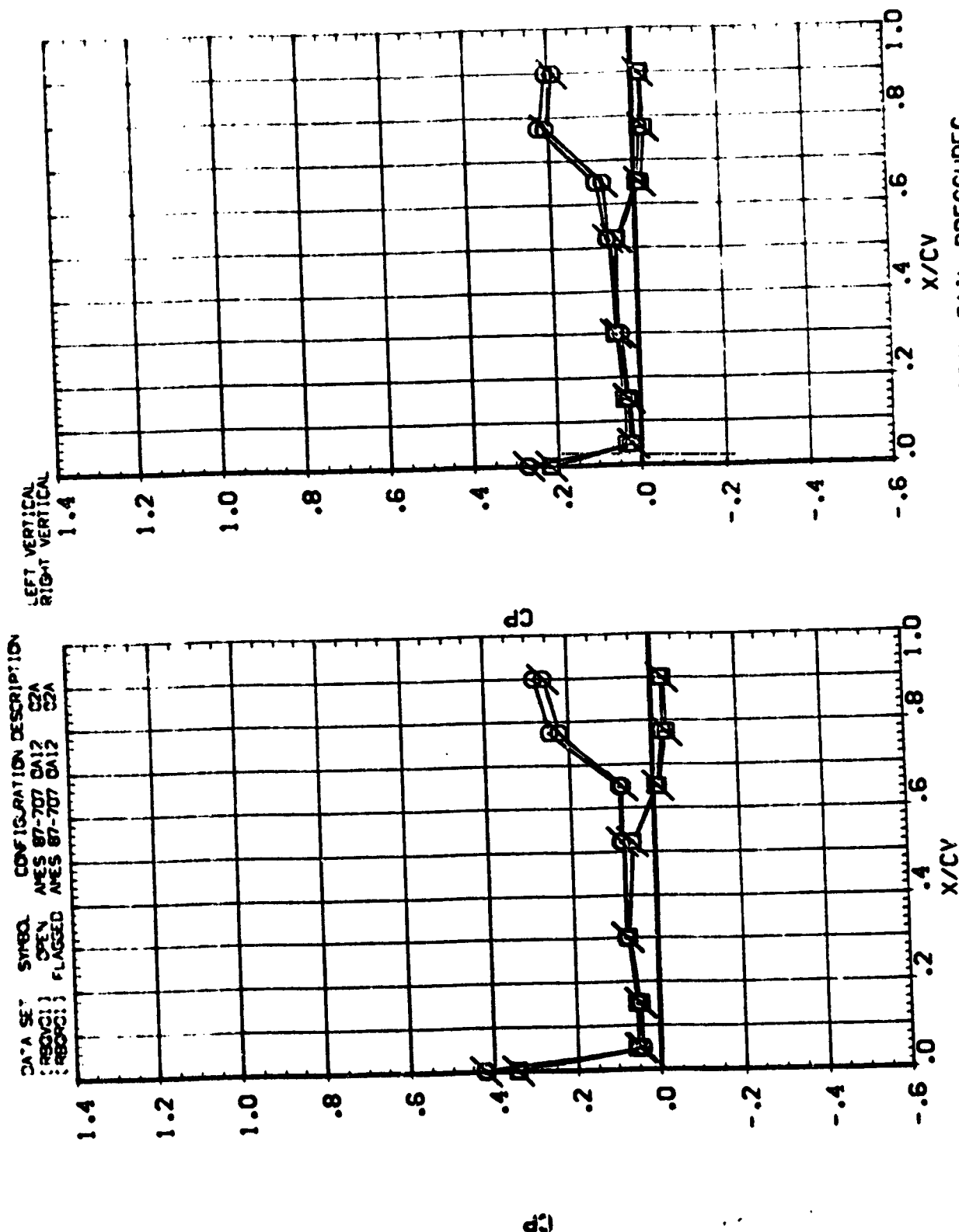
WAC--

:C:30

:S:050

3.507

BETA	.000	200.0	.000
ELEVEN	.000	200.0	40.000
PARAME "B" V. 4.5			



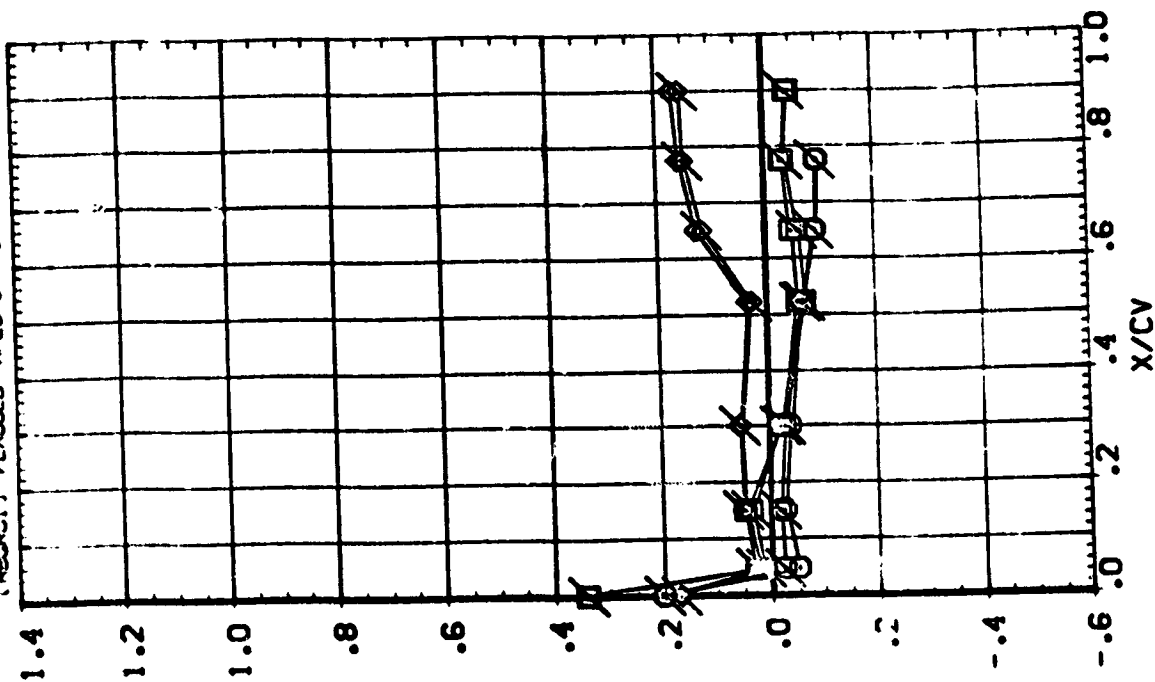
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES
X/CV

PARAMETER VALUES
 BETA .000
 ELEVON .000
 2000 2000 2000
 40000 40000 40000

SYMBOL 2/3/4 ALPHA MACH
 .158 20.020 3.502
 .315
 .630

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REBOCI) OPEN ANES 87-707 DA12 C2A
 (REBOCI) FLAGGED ANES 87-707 DA12 C2A

LEFT VERTICAL
 RIGHT VERTICAL



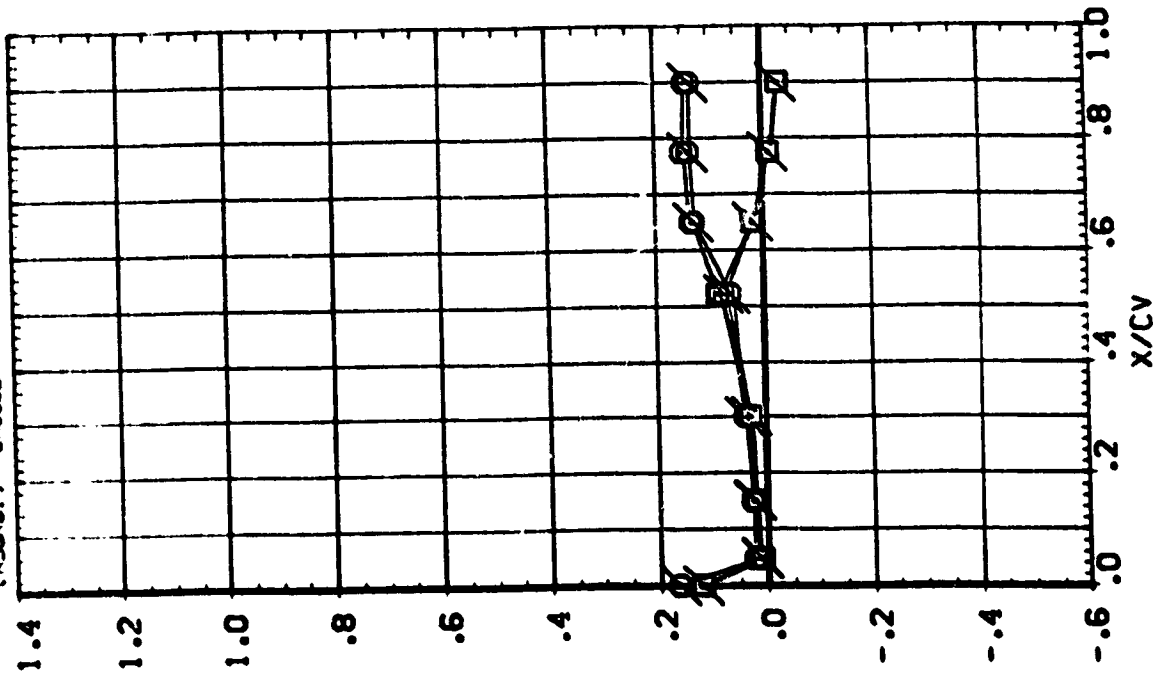
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 BETA ELEVON
 .000 .000
 .000 .000
 .000 .000

SYMBOL 1/3V .04C .975
 ALPHA 70.07C 3.507
 WACH

LEFT VERTICAL
 RIGHT VERTICAL

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RECV) ANES 87-707 CA12 C2A
 (RSCV) FLAGGED ANES 87-707 CA12 C2A

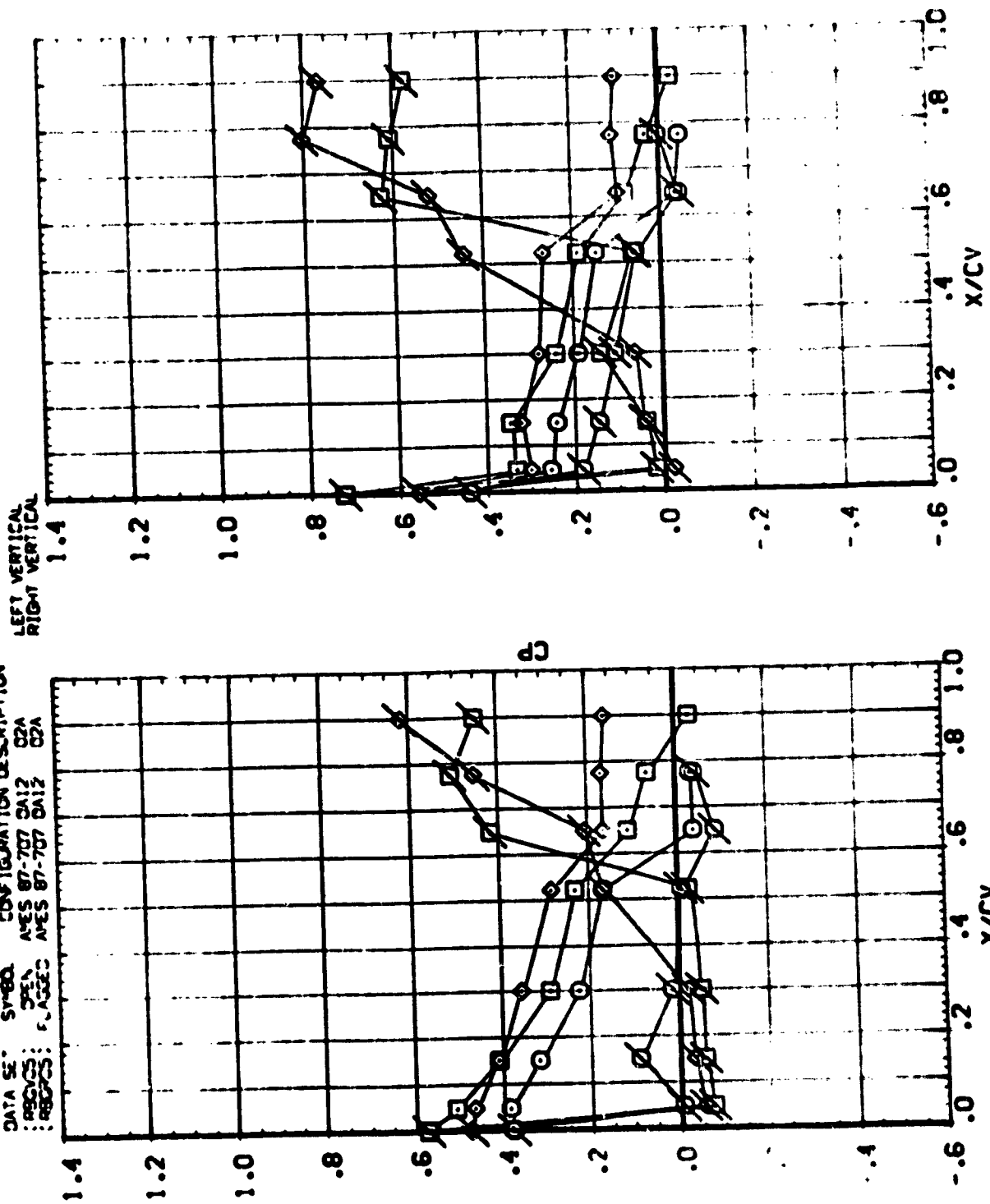


CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

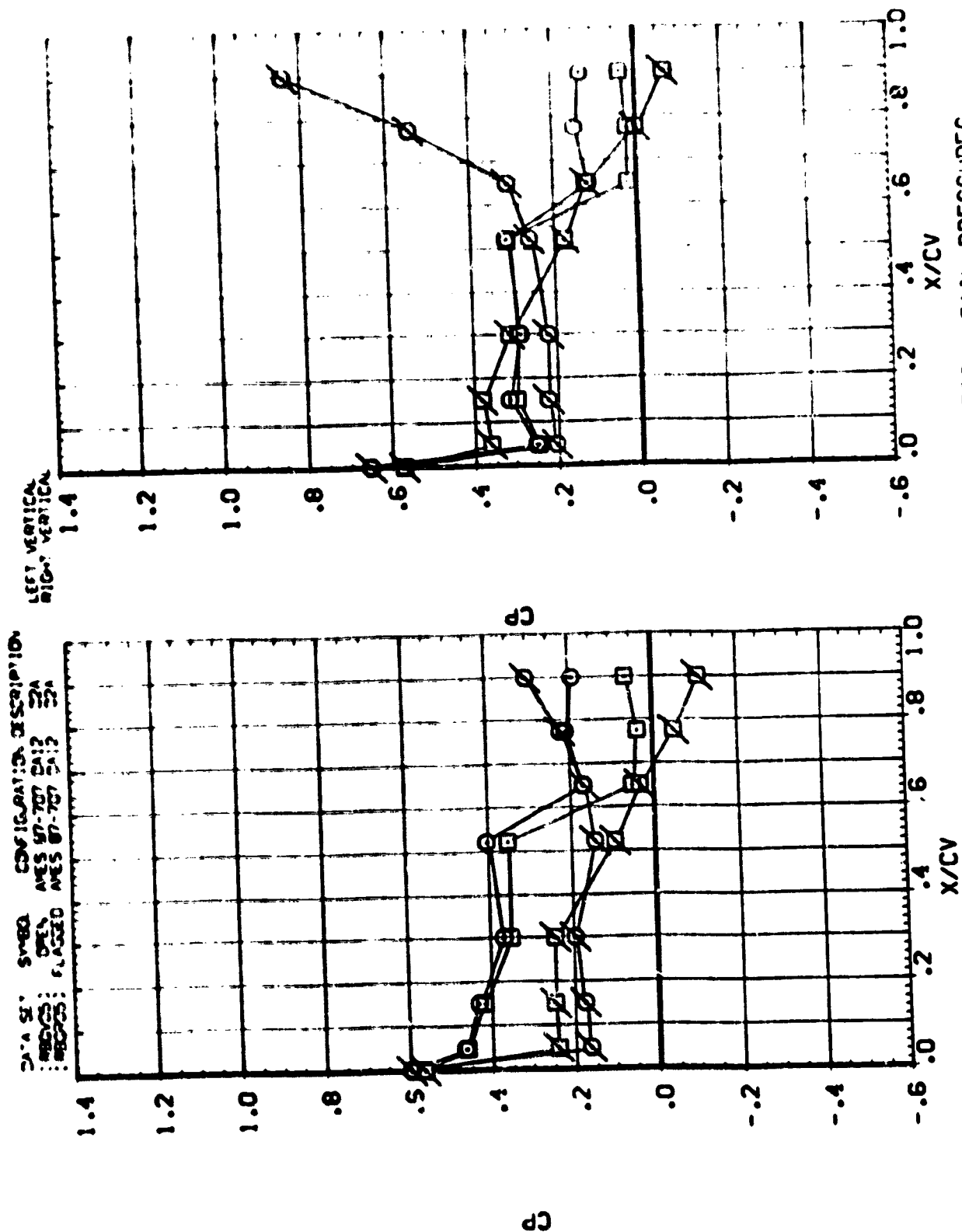
SYMBOL 2781 .58 .316 .600
 BETA .644C 2.498
 WAC 2.498

PARAMETRIC VALUES
 ALPHA .00C RLODR 70.00C
 ELEVON .00C RLODR 40.00C

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 : REGIONS OPEN APES 87-707 DAI2 Q2A
 : REGIONS FLASSED APES 87-707 DAI2 Q2A



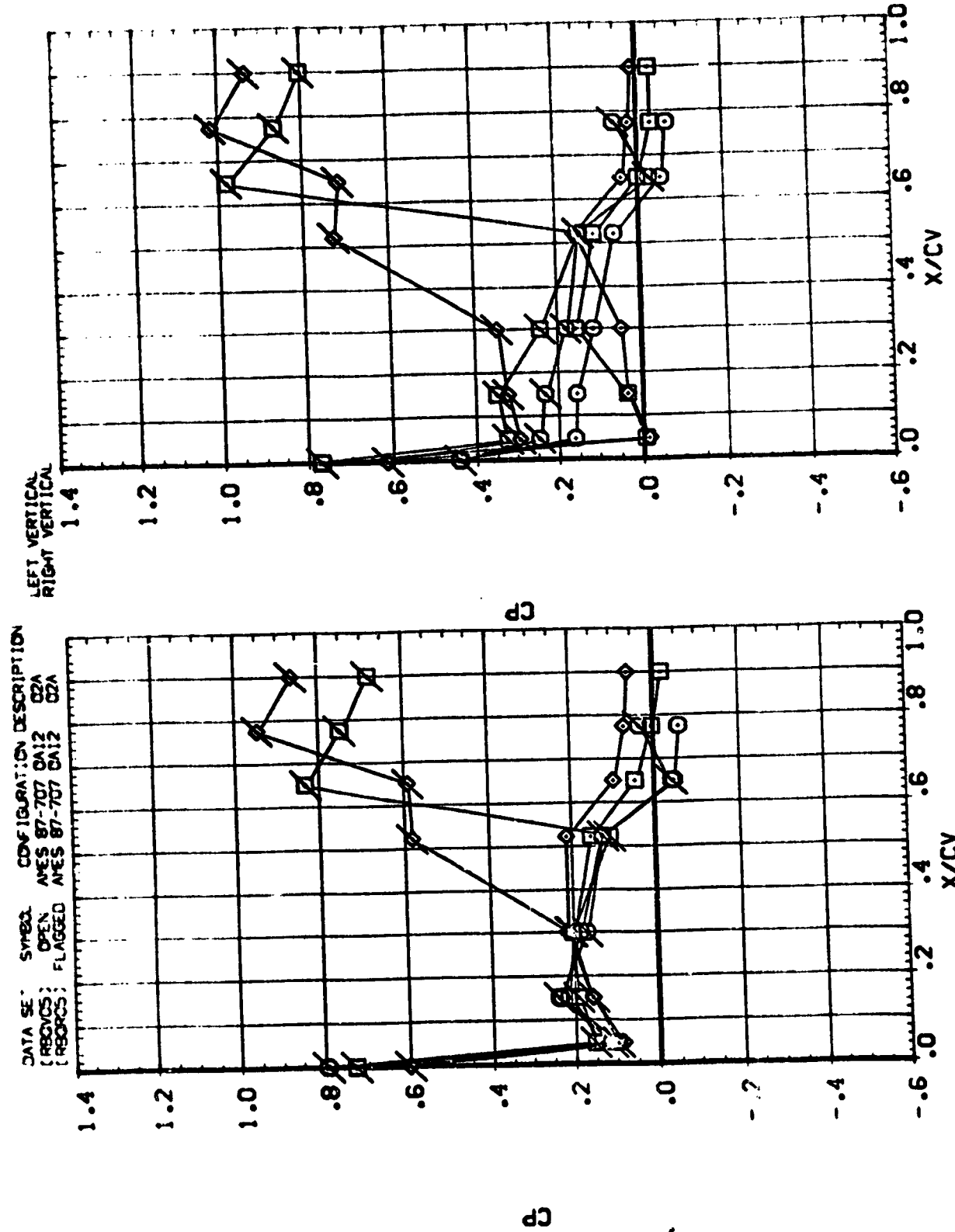
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

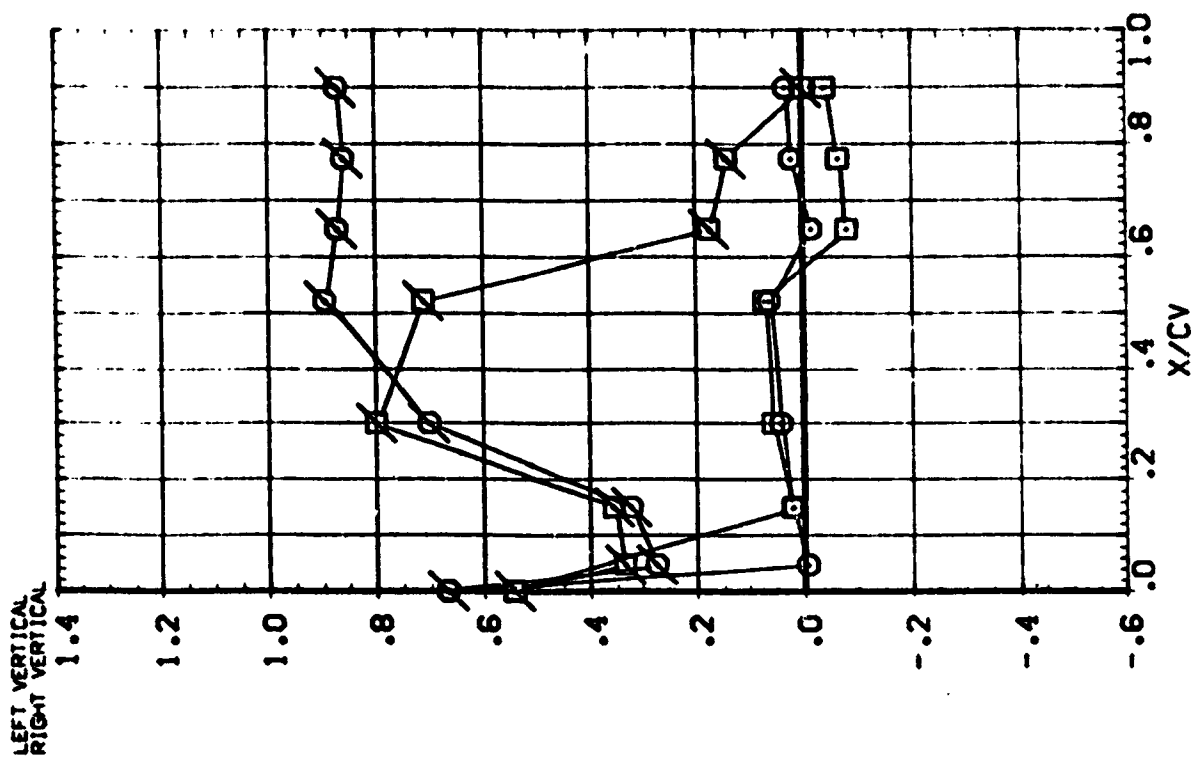
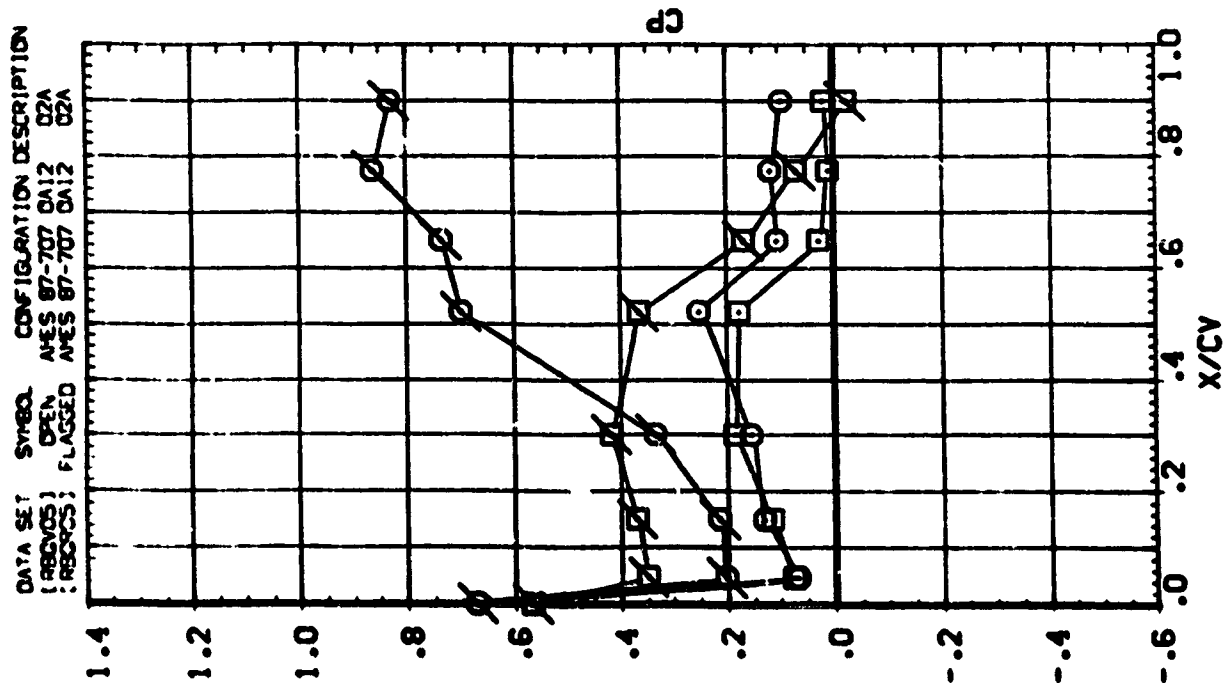


CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 ALPHA .000 RUDER -20.000
 ELEVON .000 RUFLR 40.000

SYMBL Z/BV BETA MAC-
 .158 .06C 2.498
 .316 3.05C
 .600





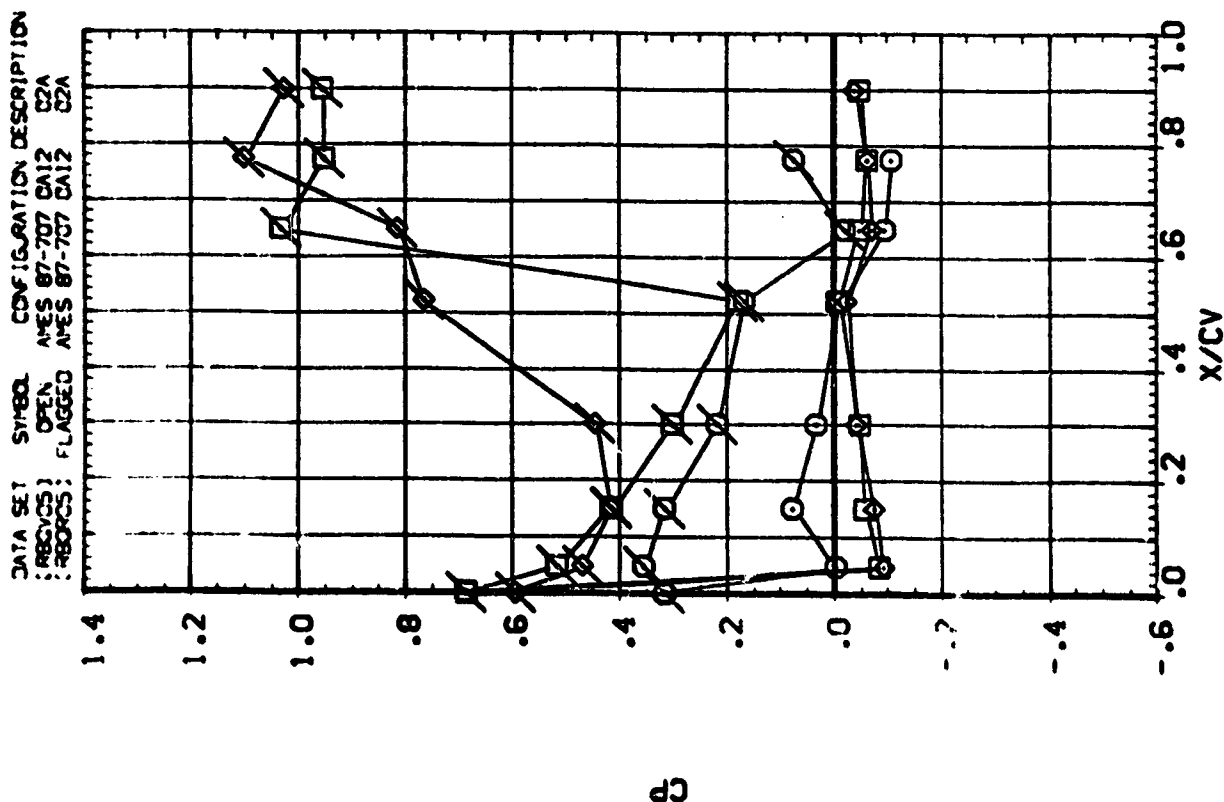
CHORONISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 .000 FLUDDER -20.000
 .000 RUDER 40.000

ALPHA
 ELEVON

SYMBOL 1/3 BE TA MAC
 .58 6.290 2.498
 .316
 .500

LEFT VERTICAL
 RIGHT VERTICAL



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

ALPHA
ELEVON

.000
.000

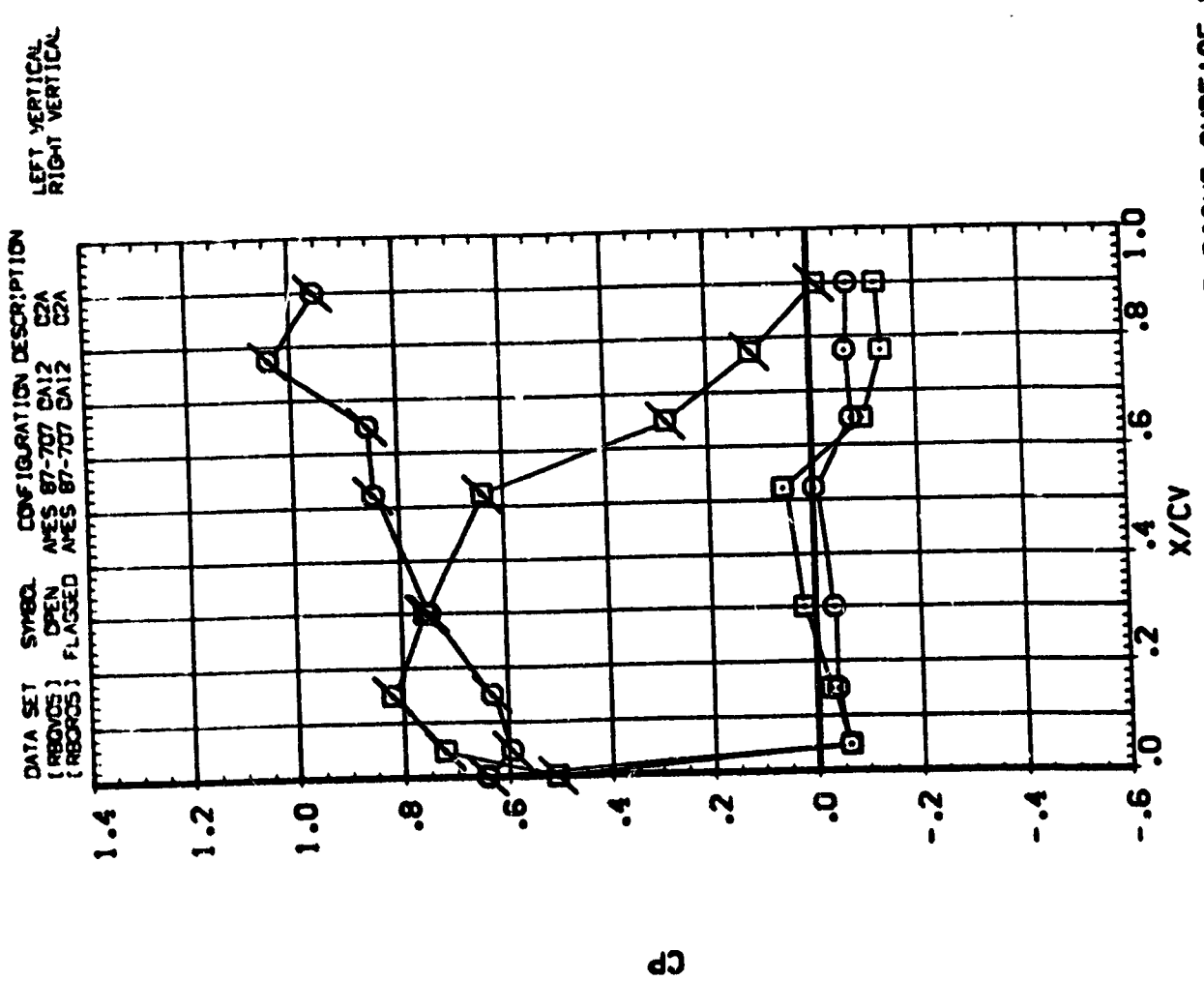
RJDER
RJDER

40.000
40.000

SYMBOL Z/BV BETA MACH

.0413 6.290 2.498

.925



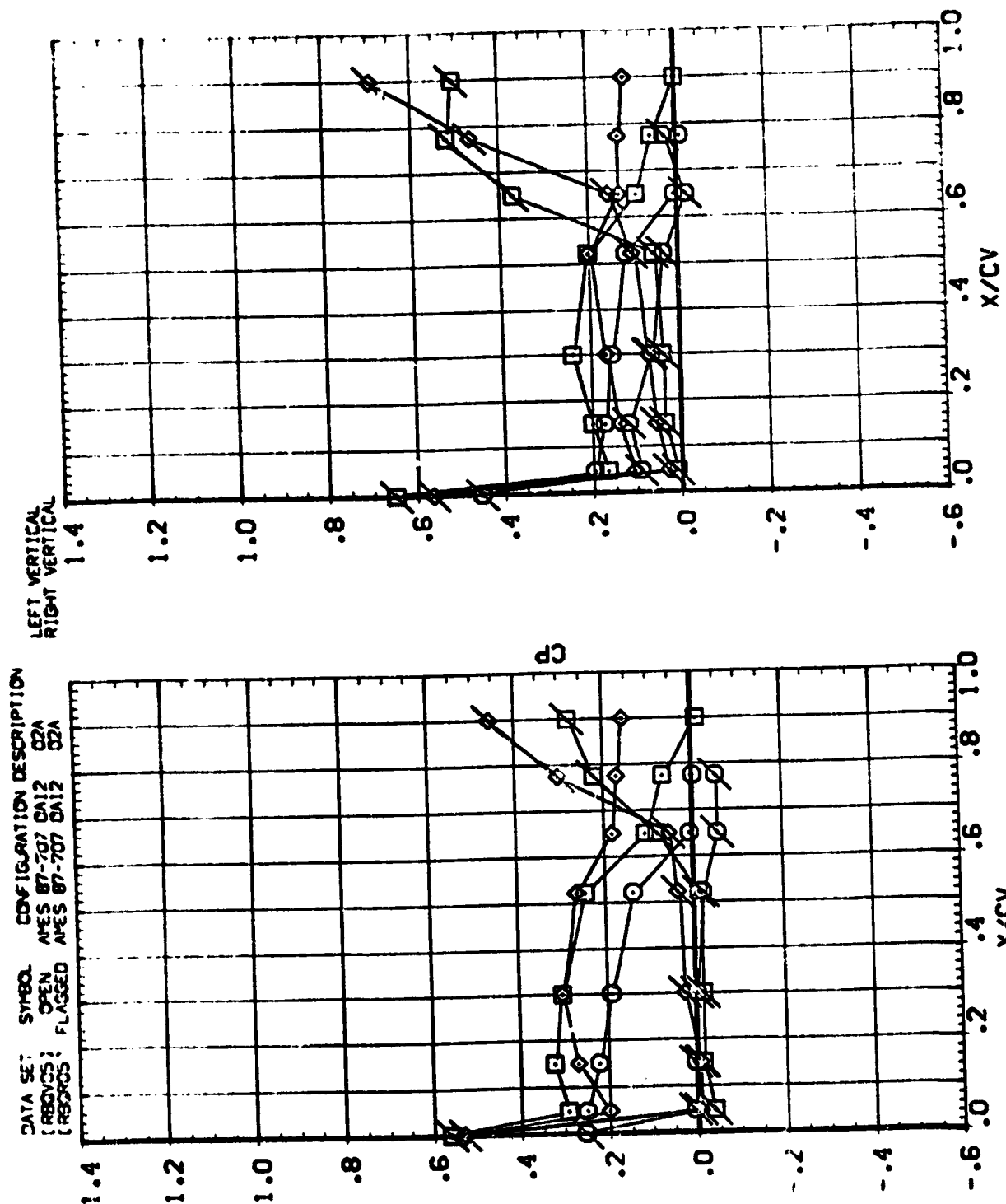
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES

ALPHA	RJDDER	RJDF, R	ELEVON
.000	.000	.000	-70.000
.000	.000	.000	40.000

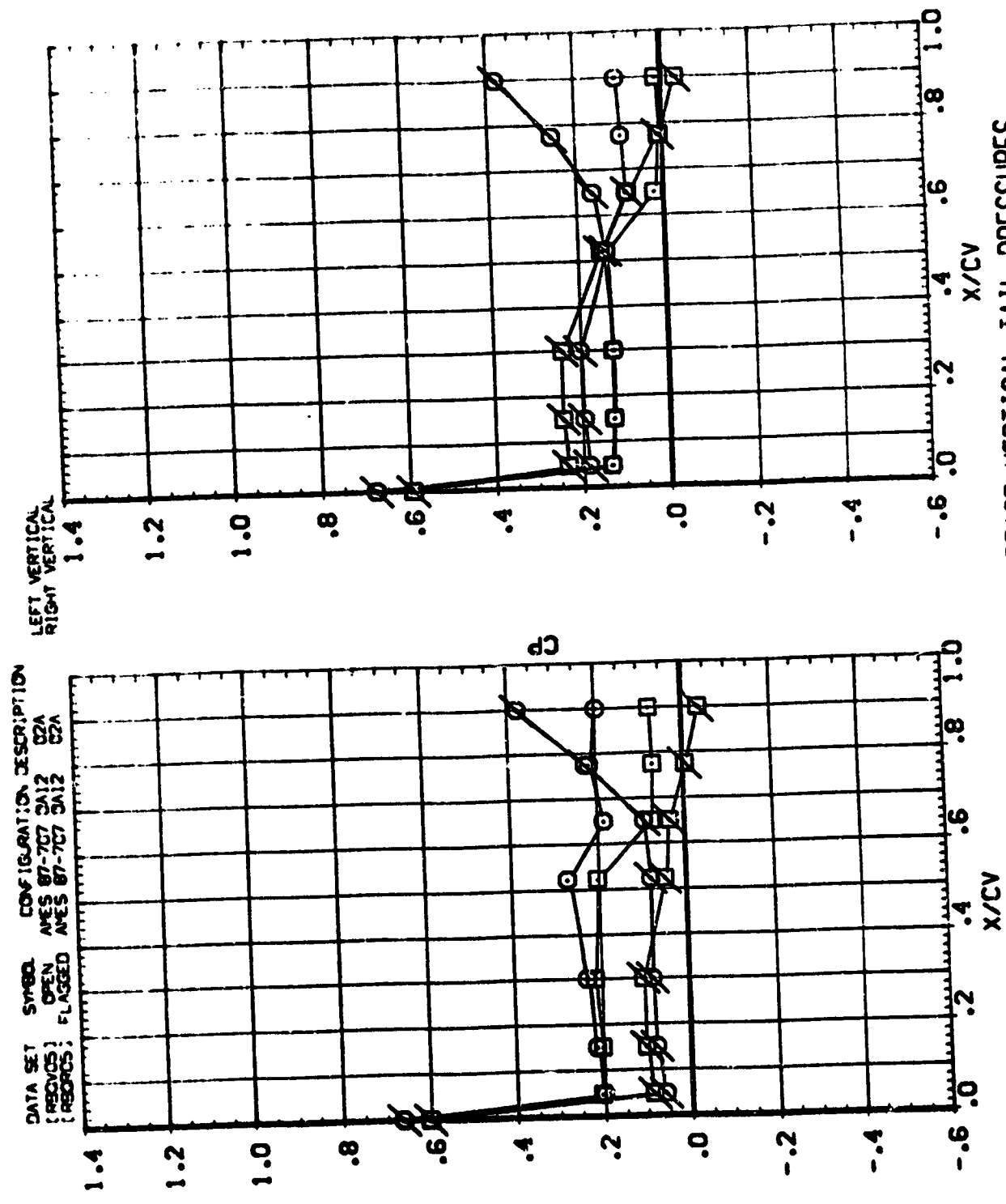
DATA SET: SYMBOL CONFIGURATION DESCRIPTION

REBOVS	FLAGGED	ANES 87-707	DA12	DA12	DA12
.158					
.316					
.600					

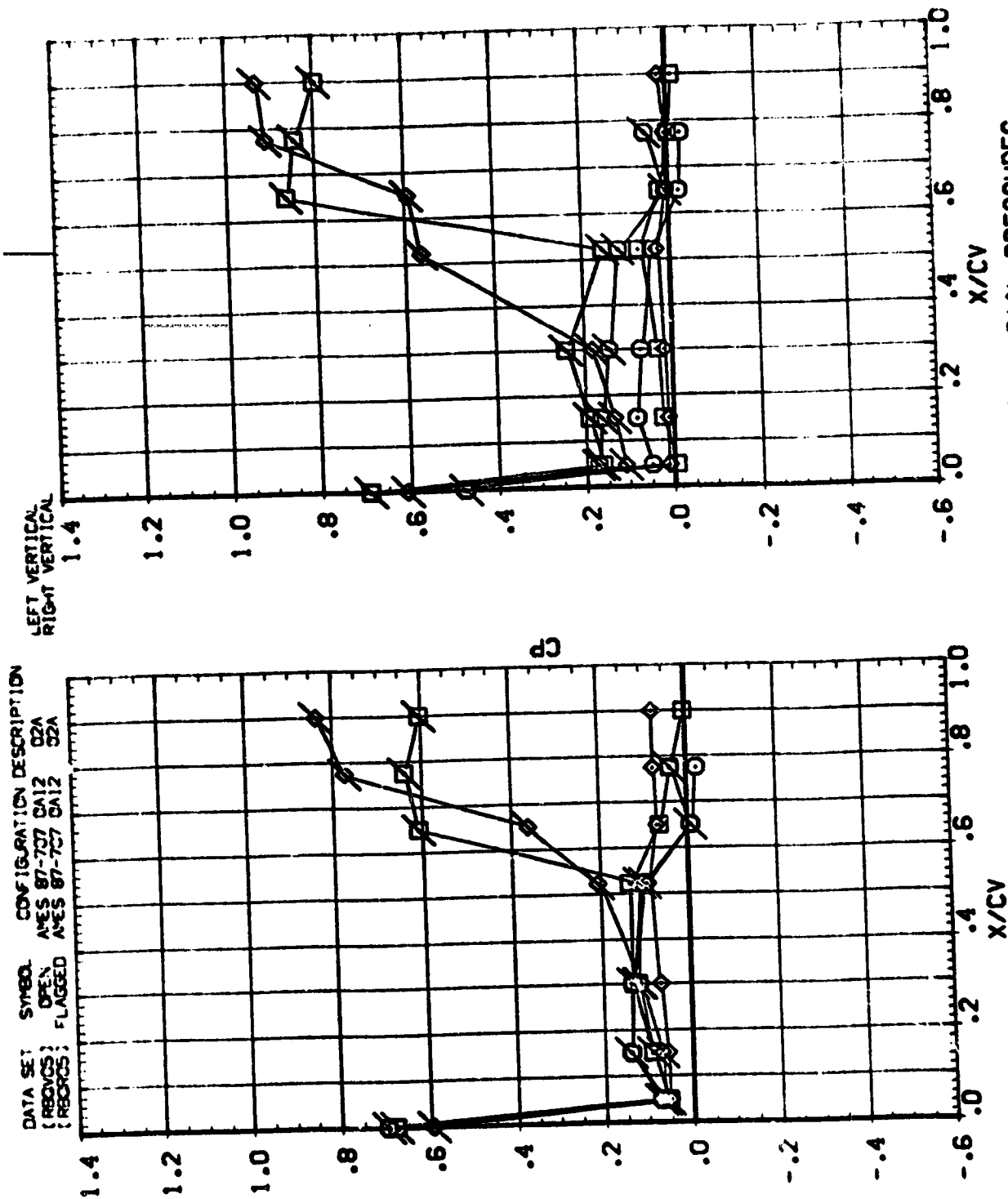


MAY 1964
 ALPHA
 ELEVON
 .000
 .000
 .000
 .000
 .000
 .000

SYMBOL
 Z/BV
 .043
 .925
 BETA
 -6.670
 -3.420
 MAC
 3.501



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES

ALPHA
ELEVON

SYMBOL: 2/3/1
0.840
0.975

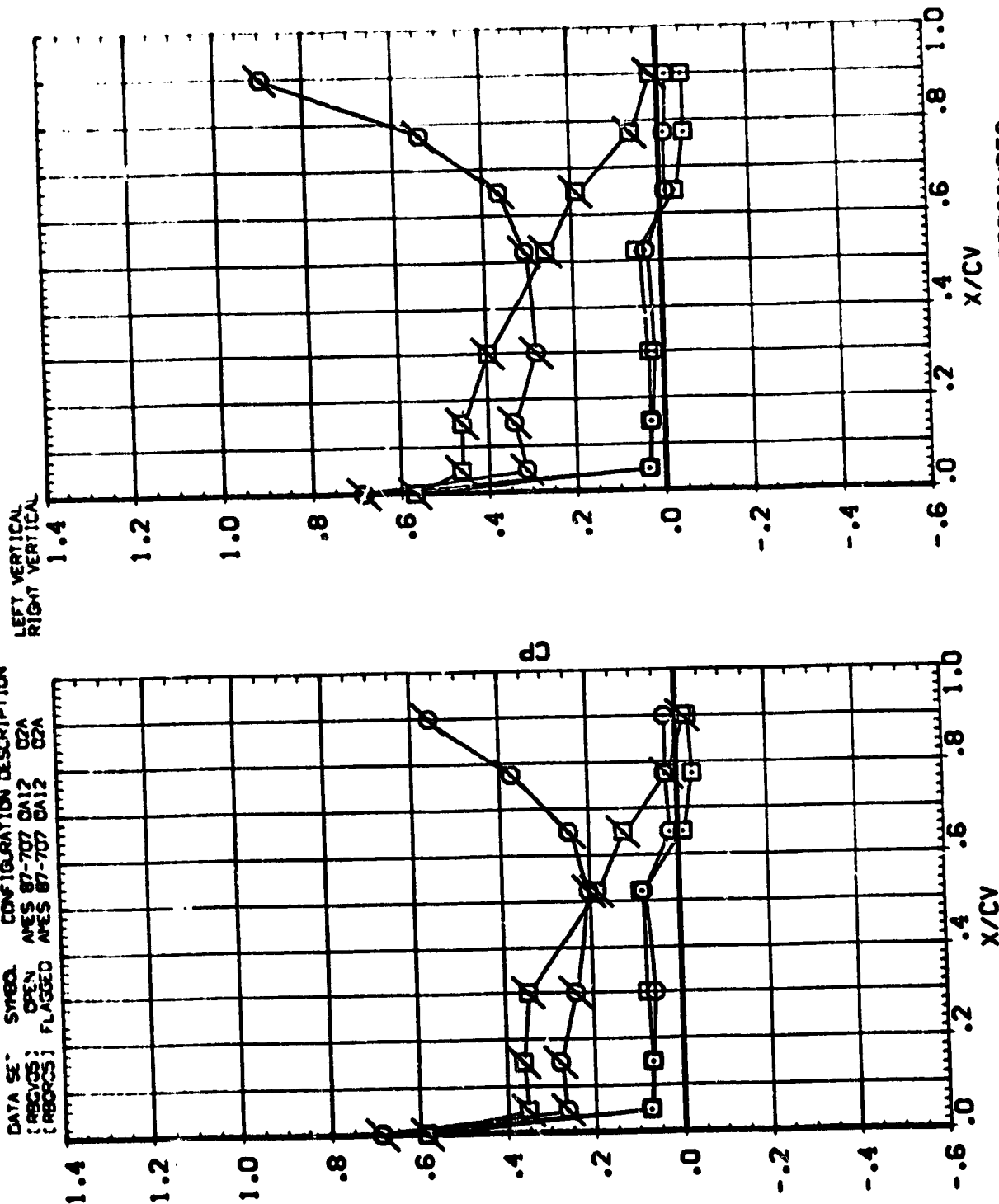
BETA: 1/3C
3.18C

WACH: 3.501

70.000
40.000

RUDER
RUD.P

DATA SET: SYMBOL: CONFIGURATION DESCRIPTION
[RECVS]: OPEN: ARES 87-707 DA12 02A
[RECVS]: FLAGGED: ARES 87-707 DA12 02A



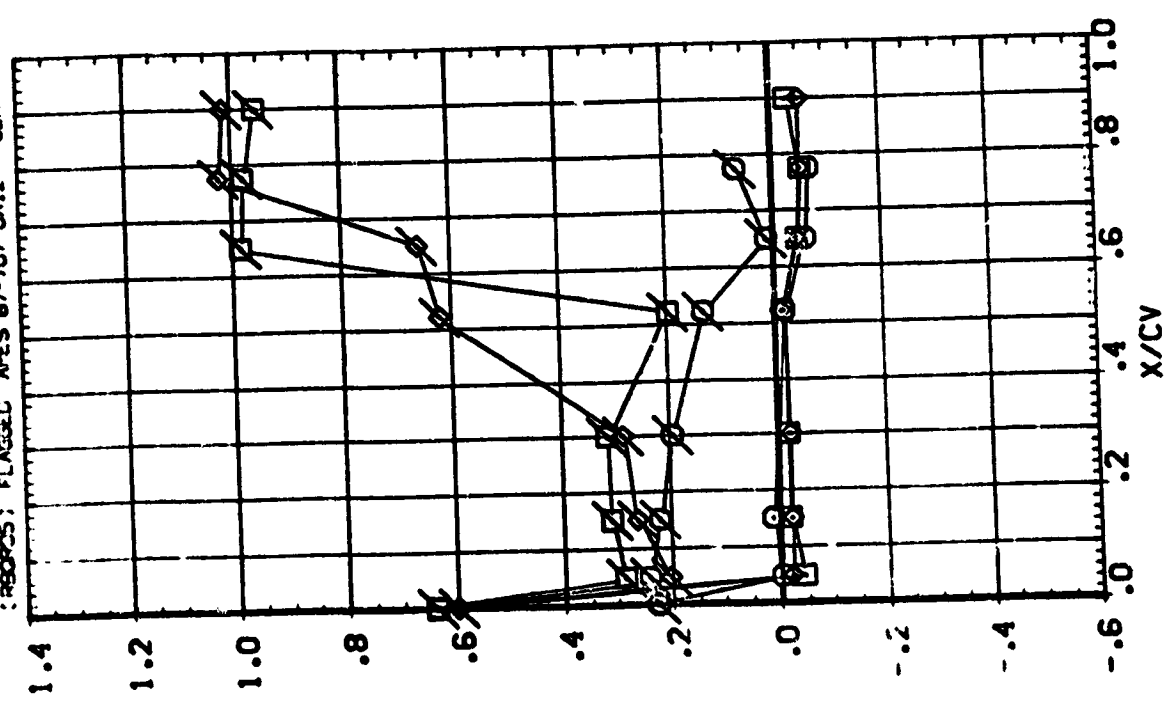
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 ALPHA .000 RUDER .75.000
 ELEVON .000 RUDER 45.000

SYMBOL 7/81 BETA 6.53C MACH 3.501
 .158
 .316
 .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RECOVER) OPEN ARES 87-707 DA12 D2A
 (RECOVER) FLANGED ARES 87-707 DA12 D2A

LEFT VERTICAL
 RIGHT VERTICAL

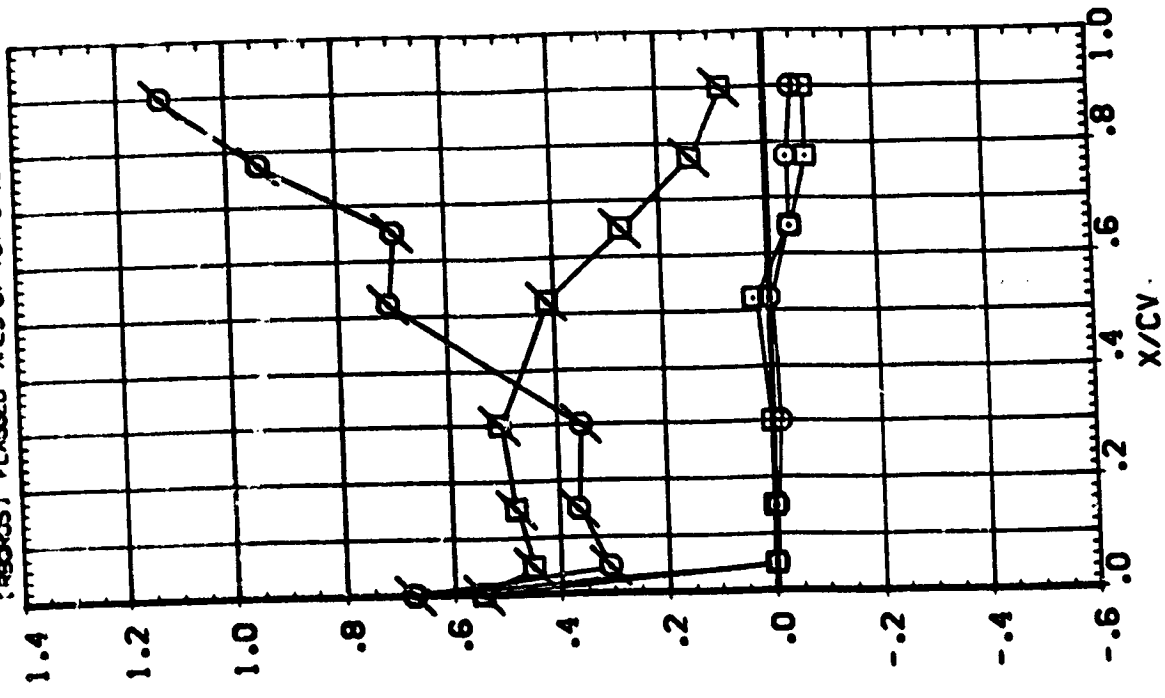


CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 .000 .000 .000
 .000 .000 .000
 .000 .000 .000
 .000 .000 .000

SYMBOL Z/BV BETA MACH
 .041 6.530 3.501
 .925

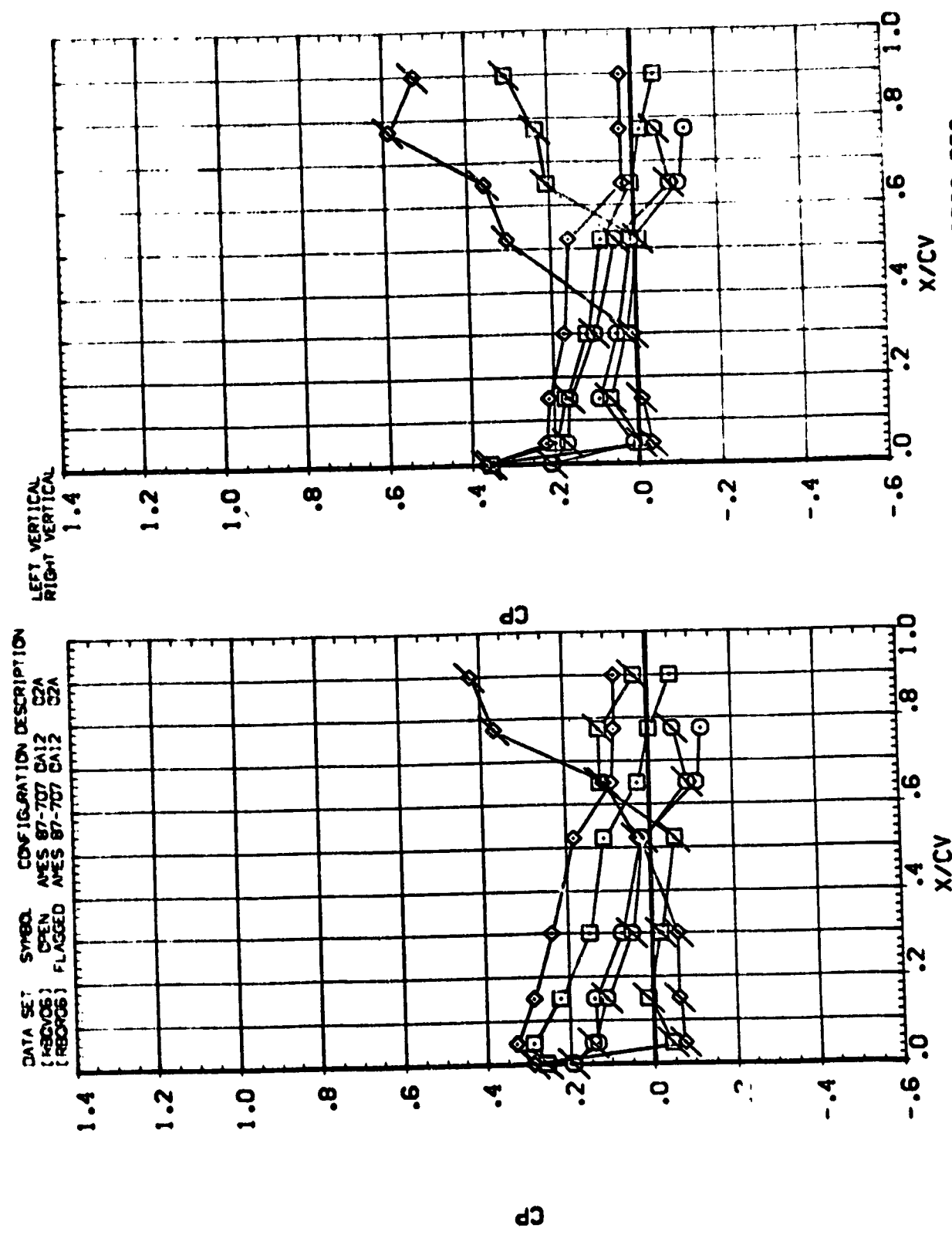
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RECORDS) OPEN ASES 87-707 DA12 C2A
 (RECORDS) FLAGGED ASES 87-707 DA12 C2A



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

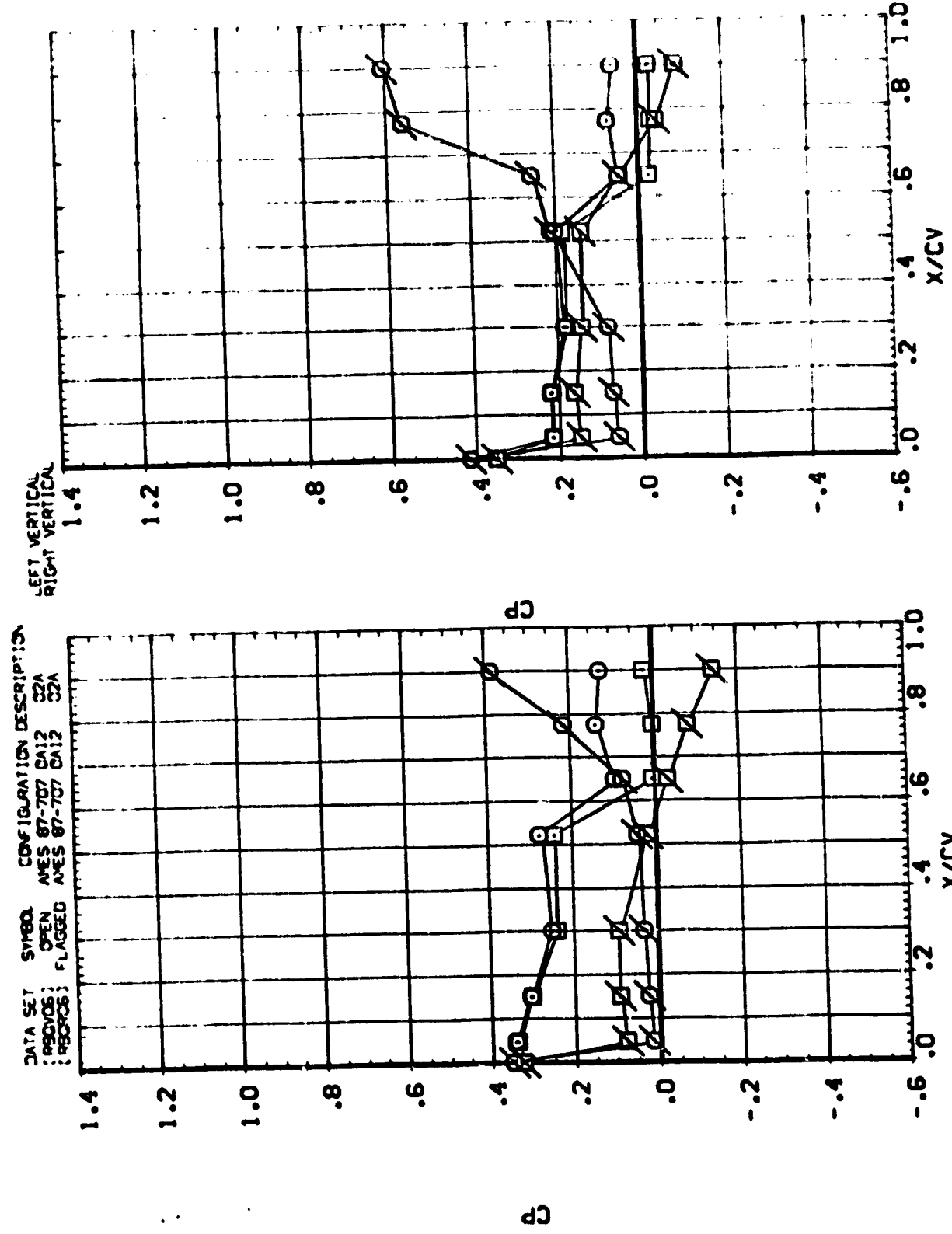
PARAMETER VALUES
 ALPHA 10.000 2.000 20.000
 ELEVON .000 2.000 40.000

SYMBOL Z/B₁ BETA MACH
 .58 -6.520 2.498
 .316 -3.340
 .600



PARAMETER VALUES
 ALPHA 20.000 20.000 20.000
 ELEVON .000 .000 .000

SYMBOL Z/B/ BETA MACH
 .04C -6.520 2.498
 .075 -3.340

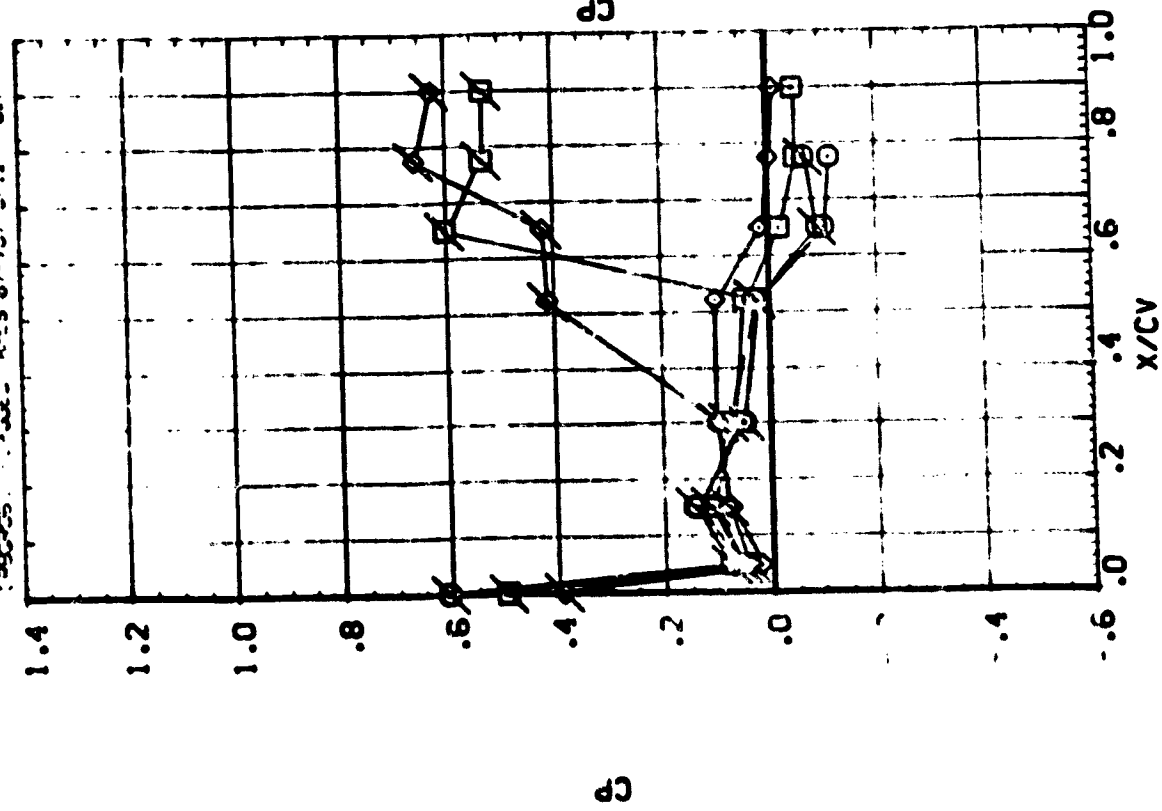
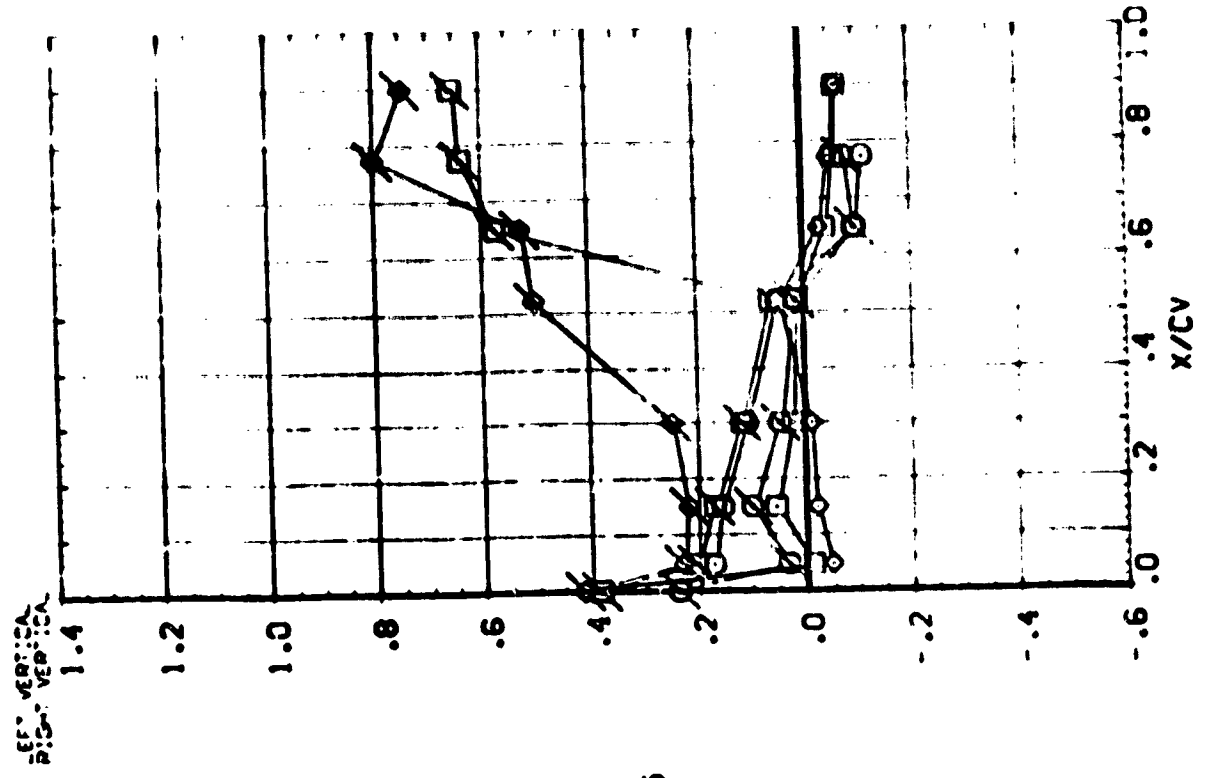


5-49C 1.78
 1.58
 1.36
 1.60

5-49C 1.78
 1.58
 1.36
 1.60

5-49C 1.78
 1.58
 1.36
 1.60

DATA SET SYMBOL DESCRIPTION
 1-5800 A-5 87-757 2A:2 22A
 1-5800 A-5 87-757 2A:2 22A
 1-5800 A-5 87-757 2A:2 22A



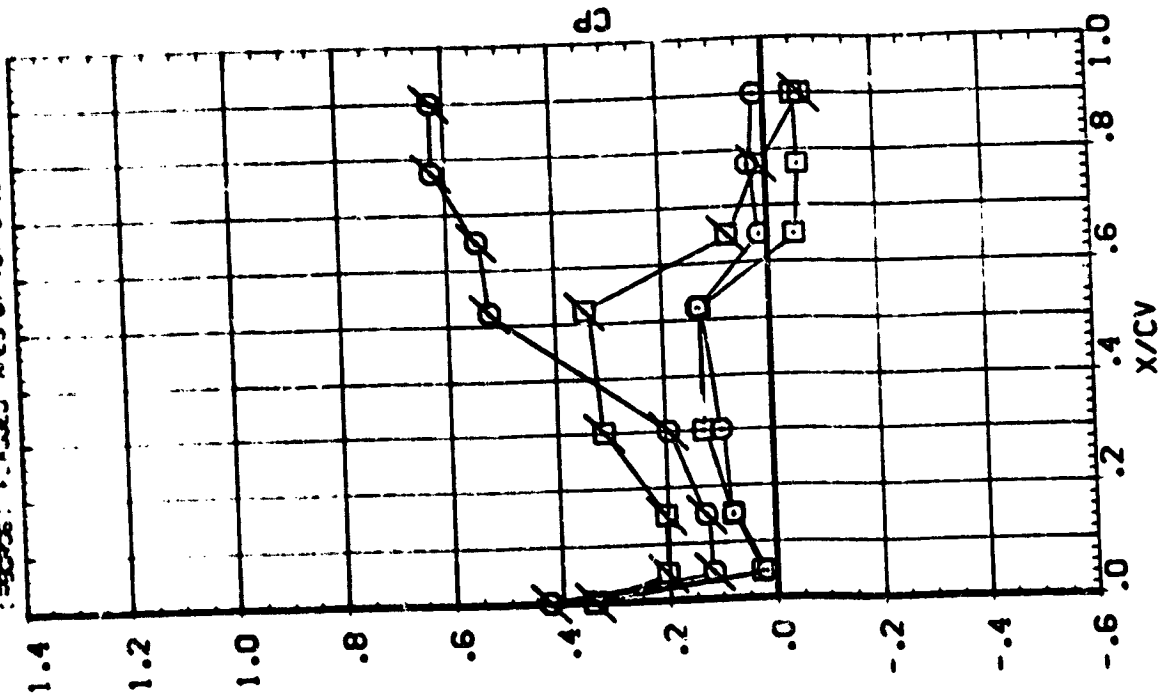
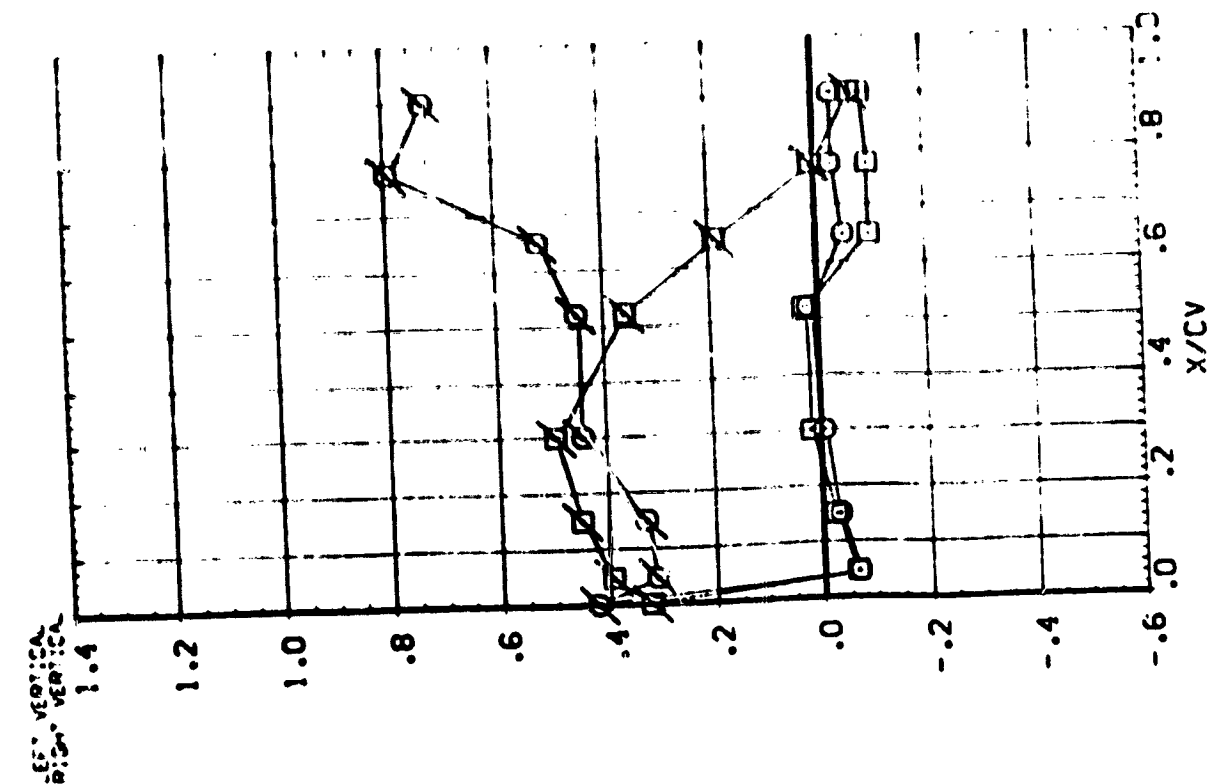
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

DATE: 10/10/55
 TIME: 10:00
 AREA: 1000
 ELEV: 2000

AREA
 ELEV

DATE: 10/10/55
 TIME: 10:00
 AREA: 1000
 ELEV: 2000

DATA SET: SYMBL
 CONF: 0000
 ANES: 07-707 0A12
 ANES: 07-707 0A12



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES
 DATE: 10/10/55
 TIME: 10:00



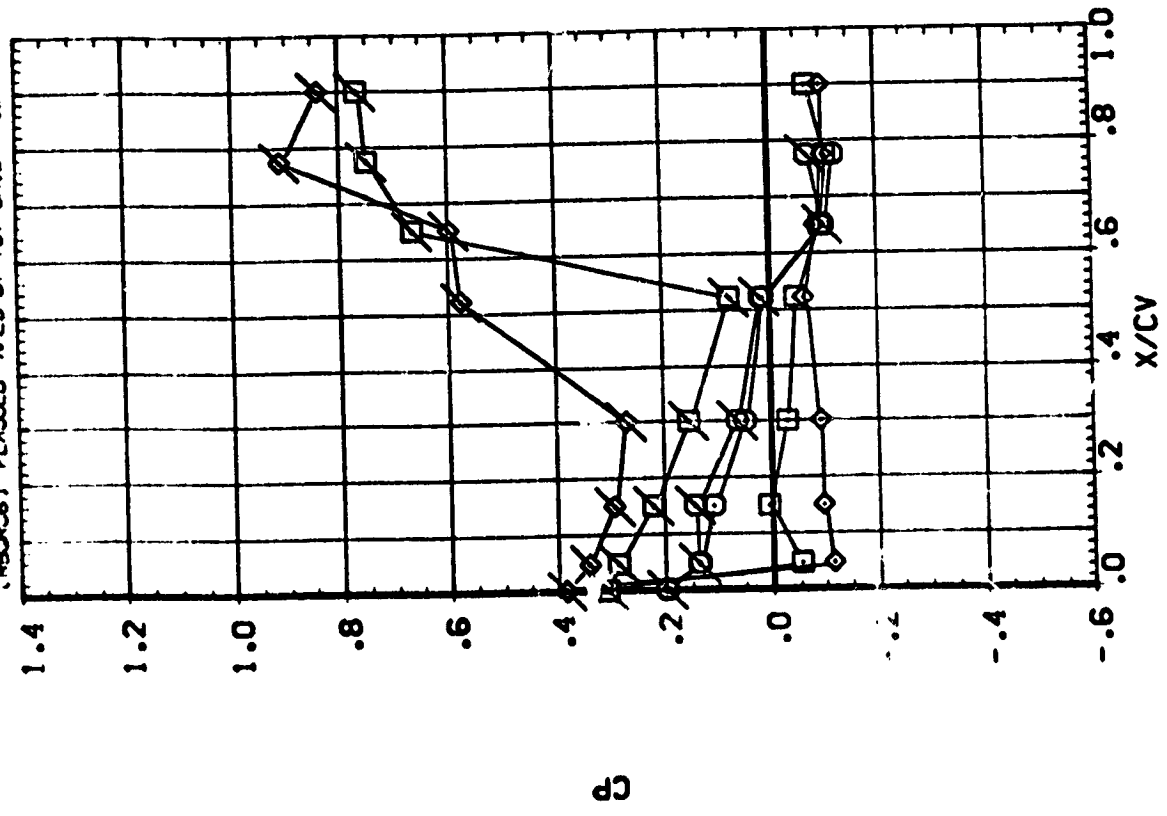
8-4

SYMBOL Z/BV BETA MACH
1:58 6.2:1 2.498
3:16
5:00

PARAMETRIC VALUES
ALPHA 10.000 RUDDER -20.000
ELEVON .000 RUD_R 40.000

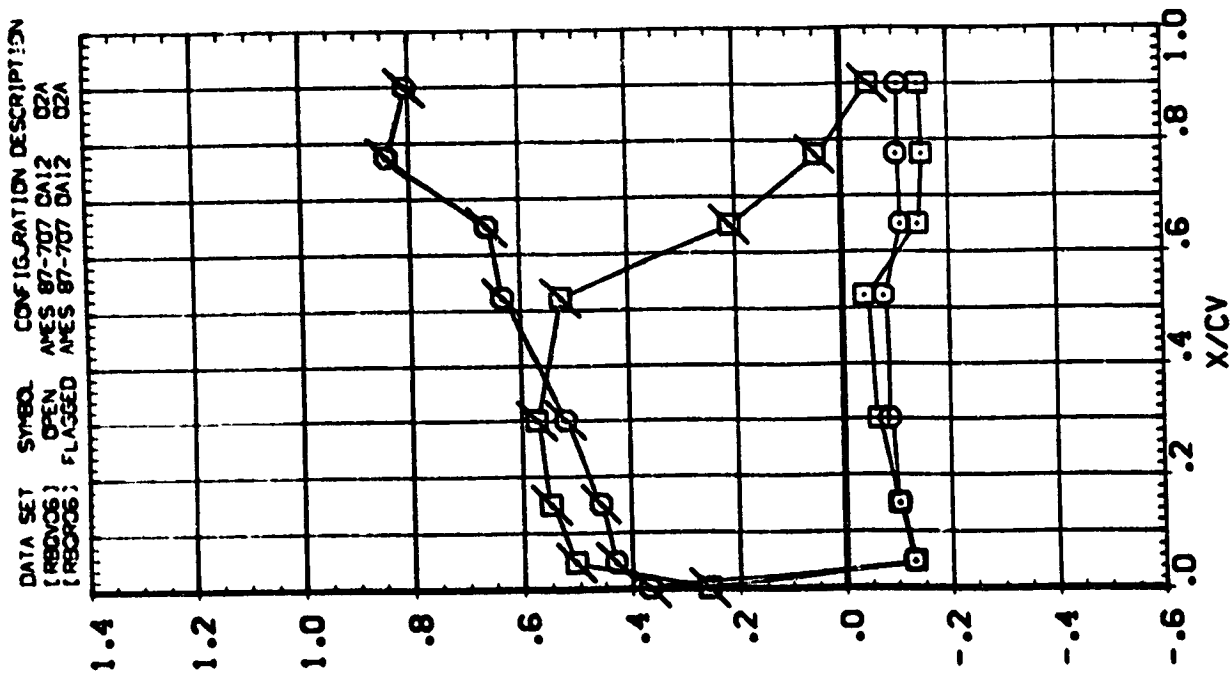
DATA SET SYMBOL CONFIGURATION DESCRIPTION
(RBC/08) OPEN ASES 87-707 OA12 C2A
(RBC/08) FLAGGED ASES 87-707 OA12 C2A

LEFT VERTICAL
RIGHT VERTICAL



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

LEFT VERTICAL
RIGHT VERTICAL

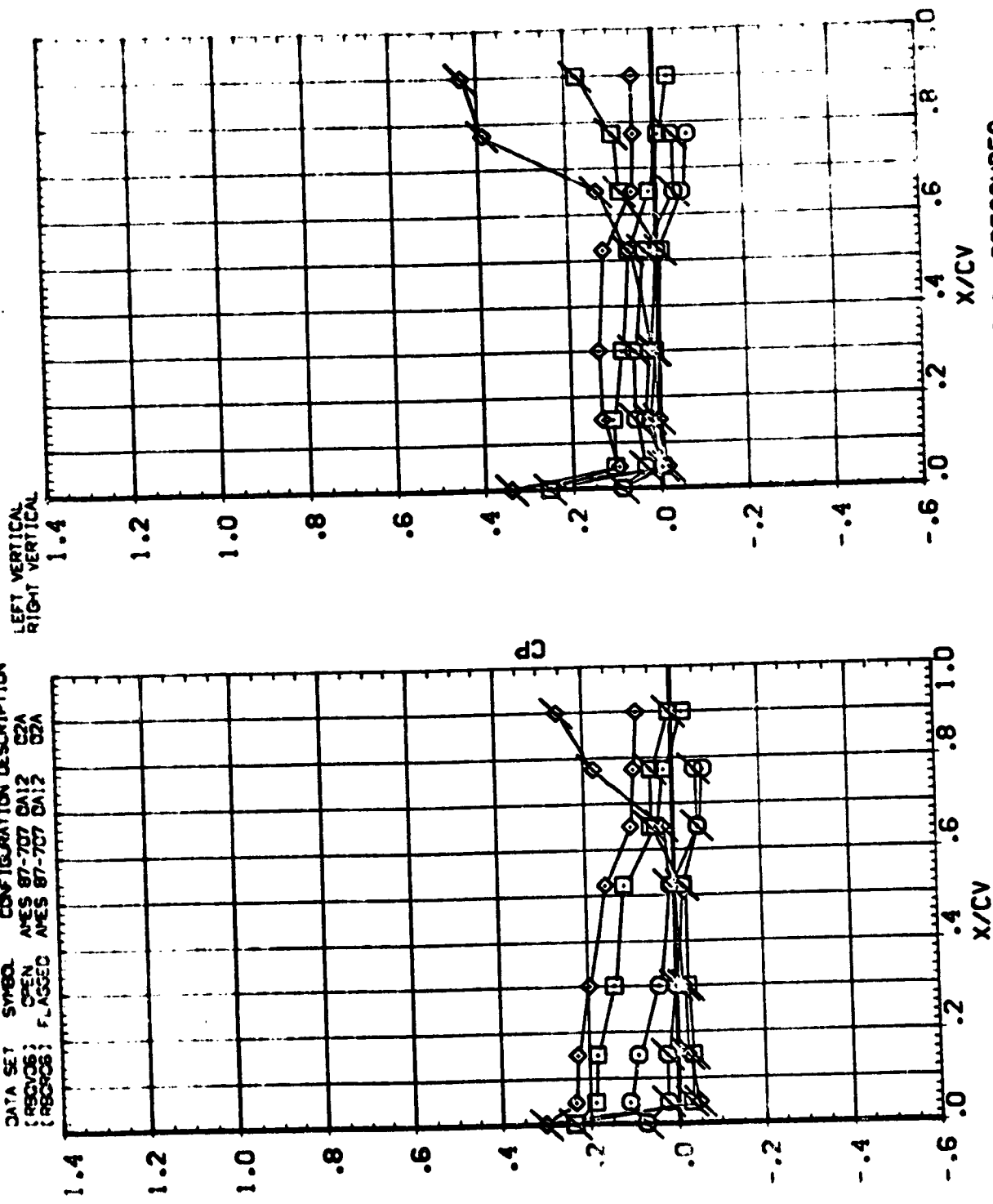


CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 ALPHA 10.000
 ELEVON .000
 RUD .2
 -70.000
 40.000

SYMBOL Z/BV BETA WACH
 .158 -6.75C 3.501
 .316 -3.45C
 .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RECORDS) OPEN ANES 87-707 DA12 C2A
 (RECORDS) FLAGGED ANES 87-707 DA12 C2A

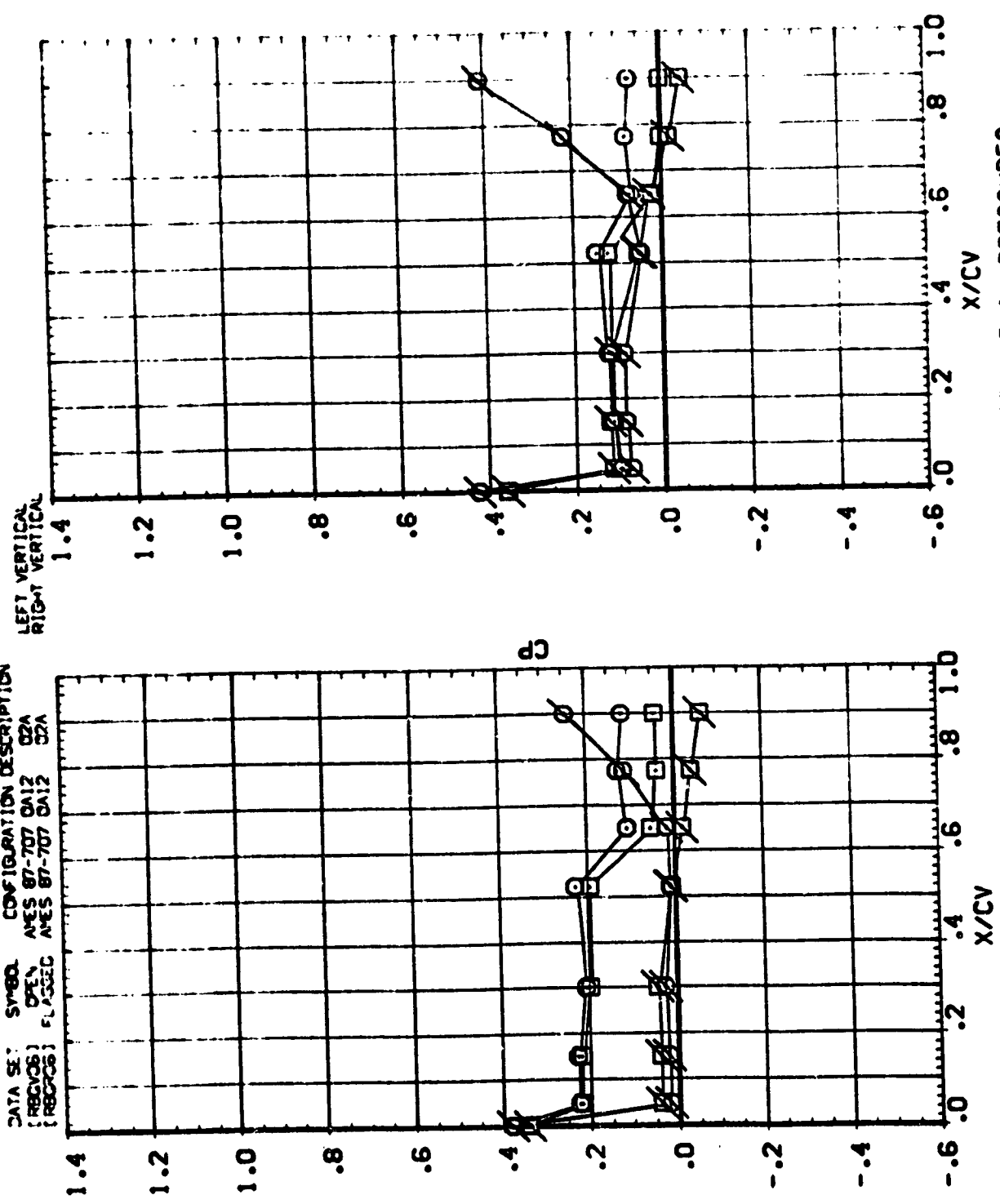


CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 ALPHA 75.000
 ELEVON 40.000

SYMBOL 2/8: .84C
 .975
 BEYA -6.75C
 -3.45C
 WAC 3.501

DATA SET: SYMBOL CONFIGURATION DESCRIPTION
 (RECV06) OPEN AVES 87-707 DA12 02A
 (RECV06) FLAGGED AVES 87-707 DA12 02A

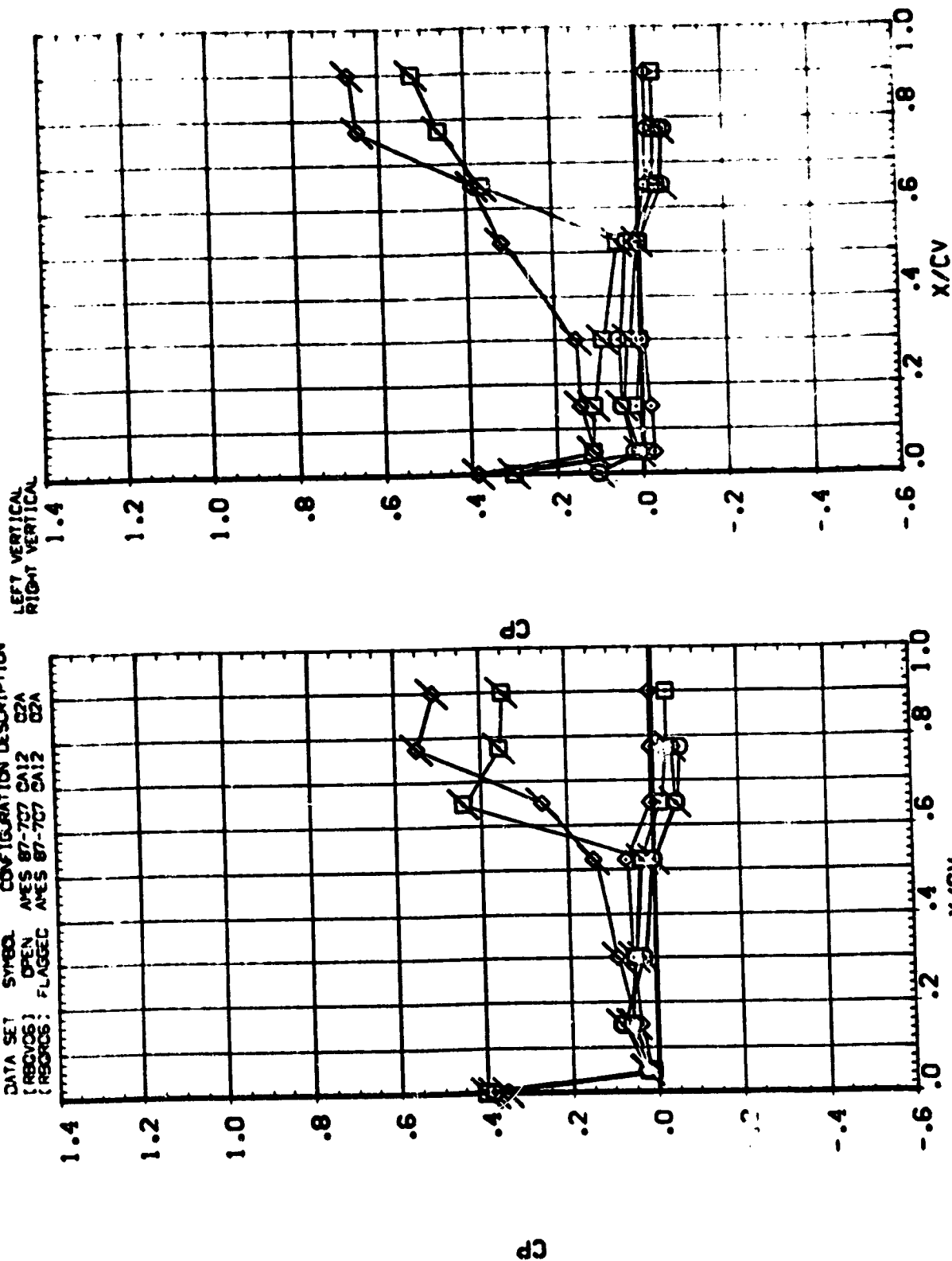


CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 ALPH 10.000 RUDER 70.000
 ELEV 0.000 ROLLOFF 40.000

SYMBOL 7/8V BETA .060 MACH 3.501
 .150
 .316 3.140
 .600

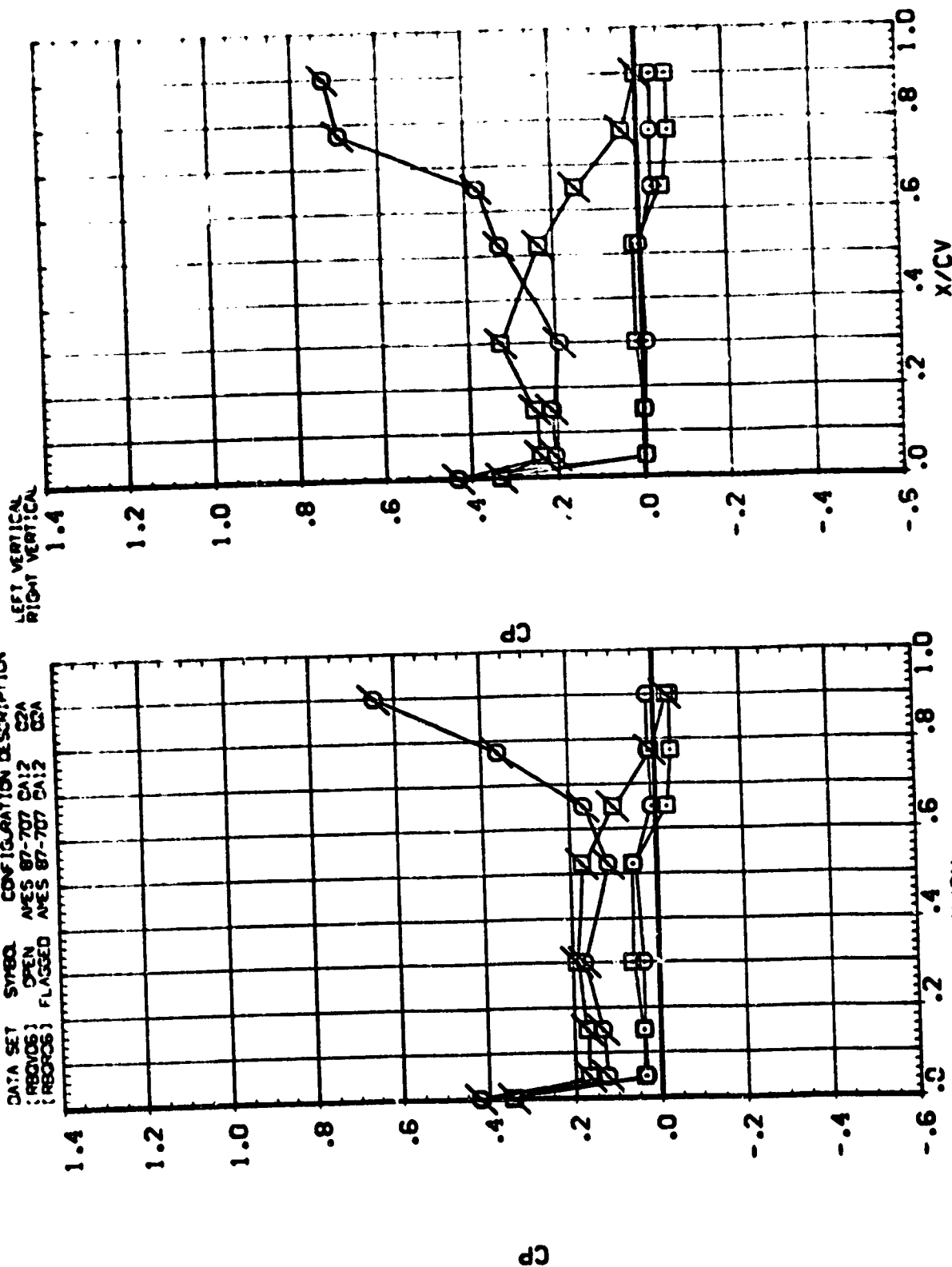
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RECOVER) OPEN AYES 87-707 DA12 G2A
 (RECOVER) FLAGGED AYES 87-707 DA12 G2A



DATE: 01-15-1975
 TIME: 10:00
 ALPH
 ELEV: 20.00

SYMB: 2/8V
 BETA: -.160
 MAC: 3.501
 .94C
 .925

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RECORDS) OPEN AVES 87-707 CA12 C2A
 (RECORDS) FLAGGED AVES 87-707 CA12 C2A



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES
 PAGE 80

SYMBOL 1/3.
 .158
 .316
 .633

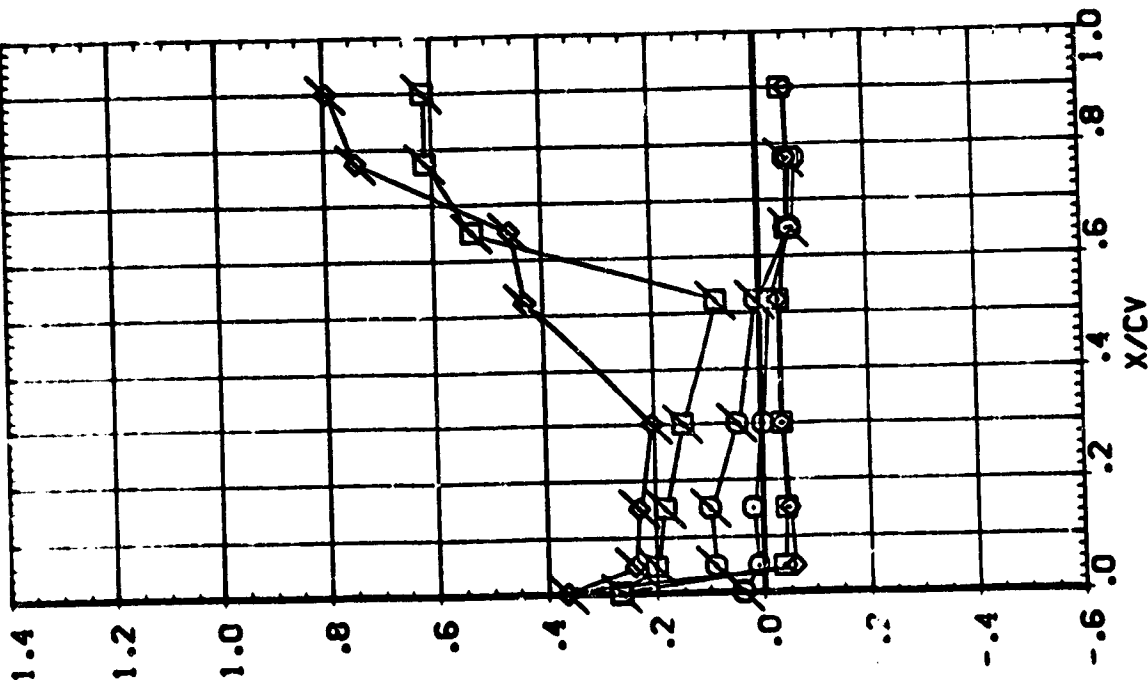
BE'A 6.44C 3.501

PARAMETRIC VALUES
 10.000 2.000 2.000
 10.000 2.000 2.000

ALPHA
 ELEVON

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REPOS) ANES 87-707 QAL2 Q2A
 (REPOS) ANES 87-707 QAL2 Q2A

LEFT VERTICAL
 RIGHT VERTICAL



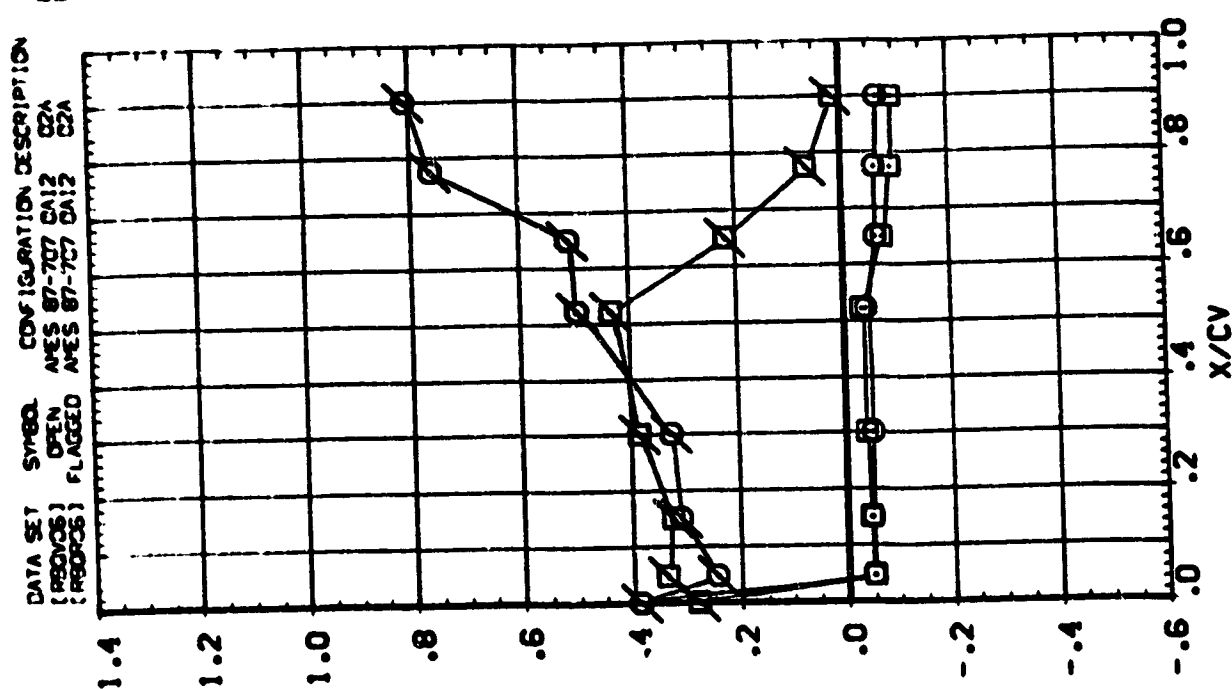
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

DATE: 11.11.2011
PAGE: 11

ALPINE
ELEVATION

SYMBOL	7/31	BETA	MAC
00	.843	6.443	3.501
01	.925		

LEFT VERTICAL
RIGHT VERTICAL



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

SYMBOL 2/3: 1.58
 3.15
 6.30

BE "A" -6.48C
 -3.37C

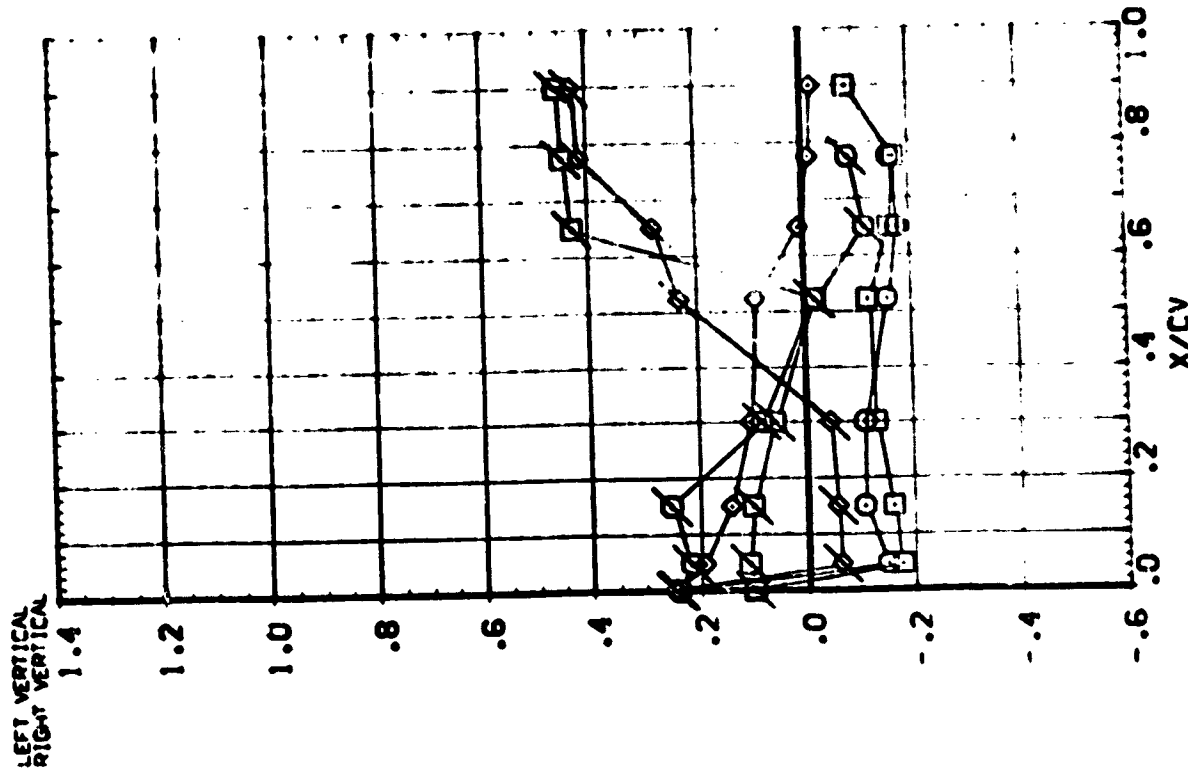
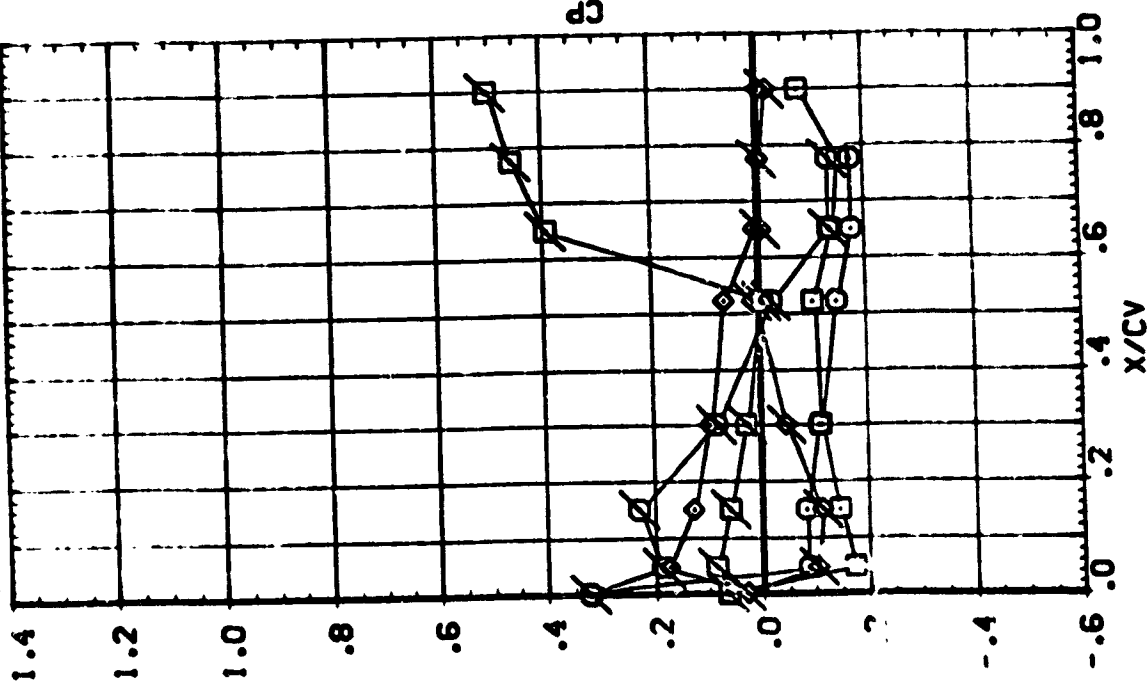
MACH 7.498

PARAMETER VALUES

ALPHA
 ELEVATION

20.00C
 20.00C
 20.00C

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 180C77 OPEN ANES 87-707 DA12 C2A
 180C77 FLAGGED ANES 87-707 DA12 C2A



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

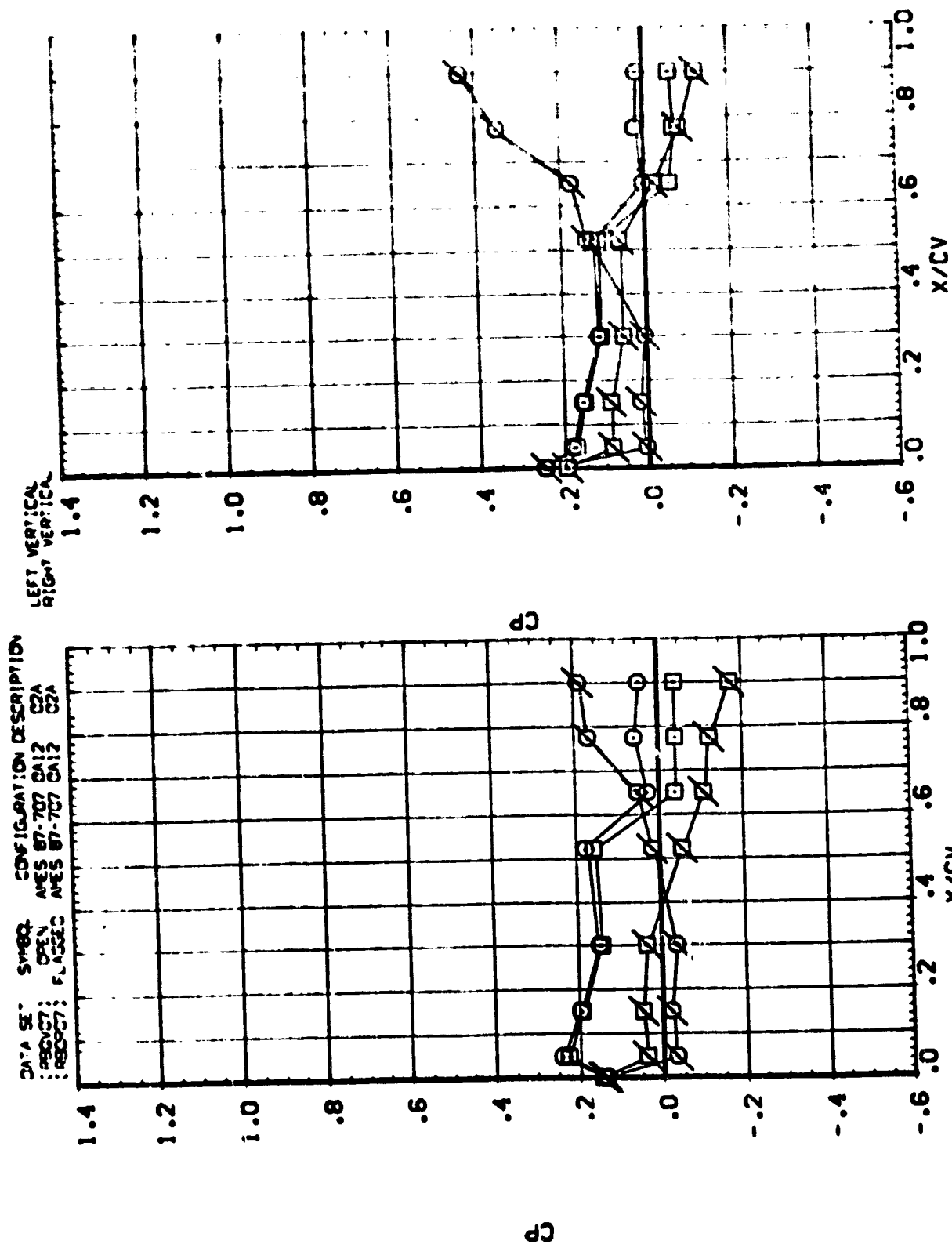
SYMBC 2/5N
 .843
 .925

BETA
 -6.48C
 -3.37C

WAC-
 7.498

PARAM 2.2 1.2 1.5
 70.00C 2.00C 1.00C
 1.00C 0.50C 0.25C

DATA SET: SYMBOL CONFIGURATION DESCRIPTION
 : RECD7: OPEN ANES 87-707 DAI2 C2A
 : RECD7: FLAGGED ANES 87-707 DAI2 C2A



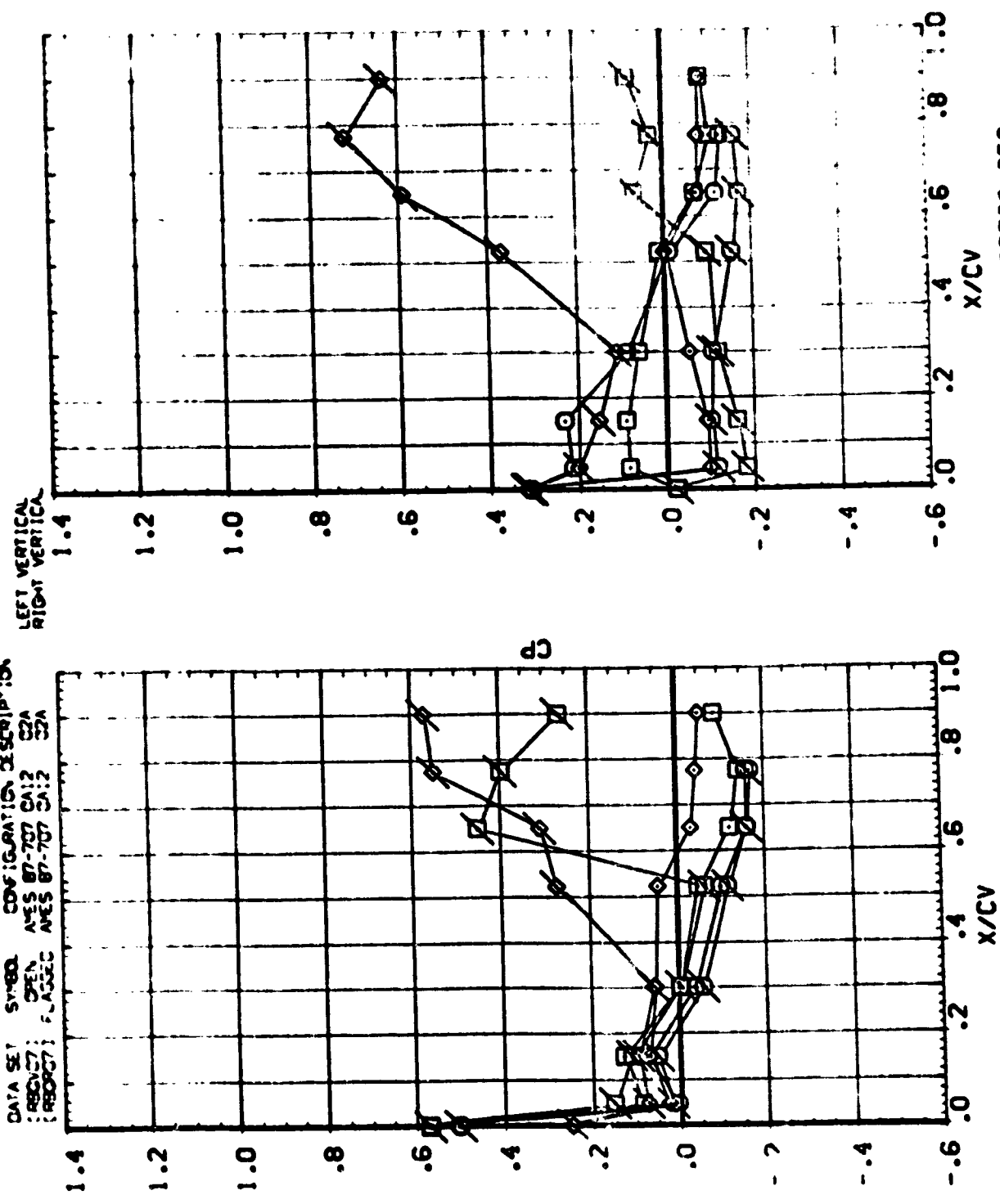
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

20.000 20.000 20.000
 20.000 20.000 20.000
 20.000 20.000 20.000
 20.000 20.000 20.000

20.000
 20.000
 20.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 : RECOVER OPEN ASES 87-707 CA12 C2A
 : RECOVER FLAGGED ASES 87-707 CA12 C2A

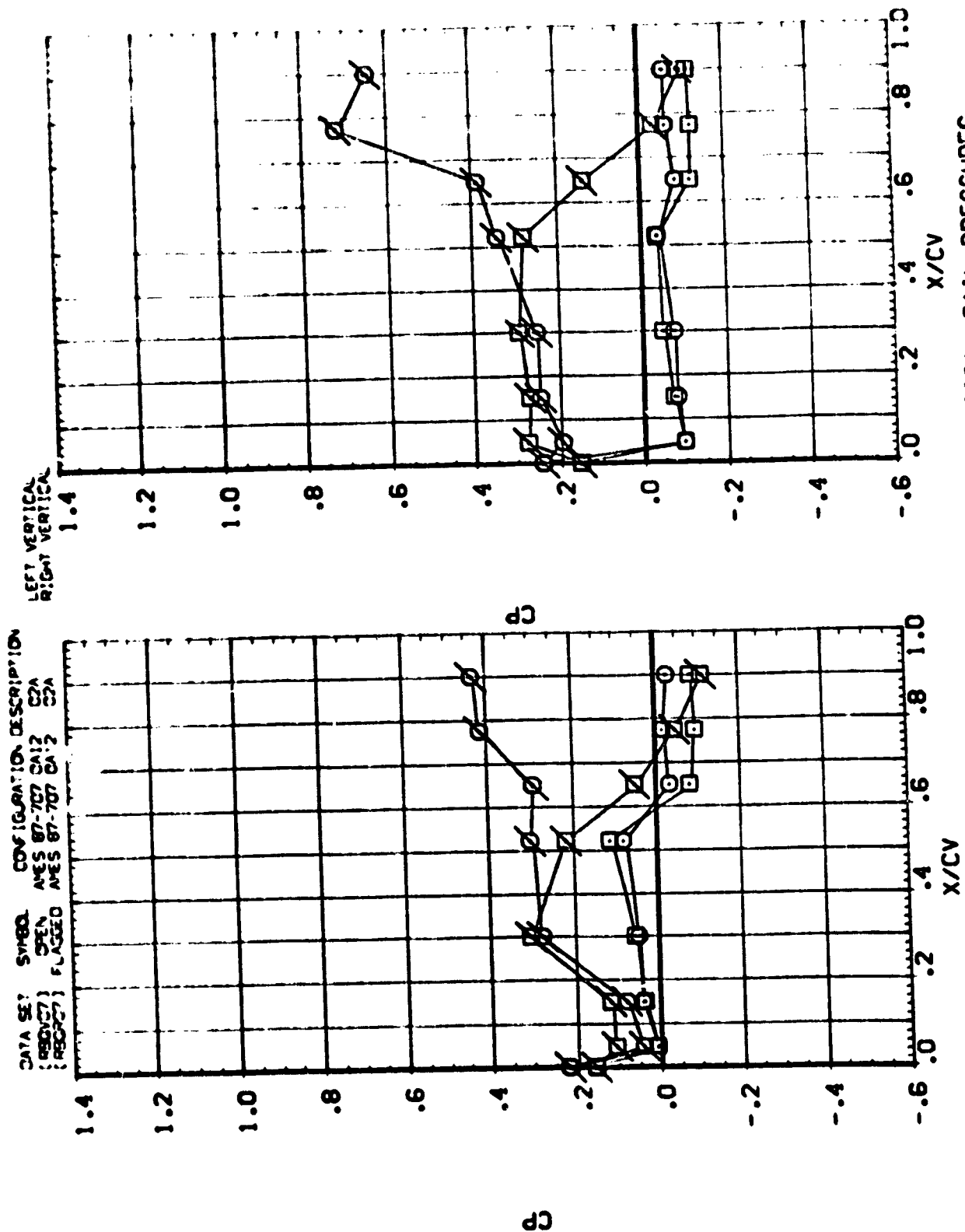
20.000 20.000 20.000
 20.000 20.000 20.000
 20.000 20.000 20.000
 20.000 20.000 20.000



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES
 8:3

PARAM 2:5 11.415
 ALPHA 20.000 2.000 2
 ELEVON .000 2.000 2

SYMBO 2/50
 .04C
 .975
 SE'A
 .15C
 3.04C
 "AC"
 2.498



7.00
0.00

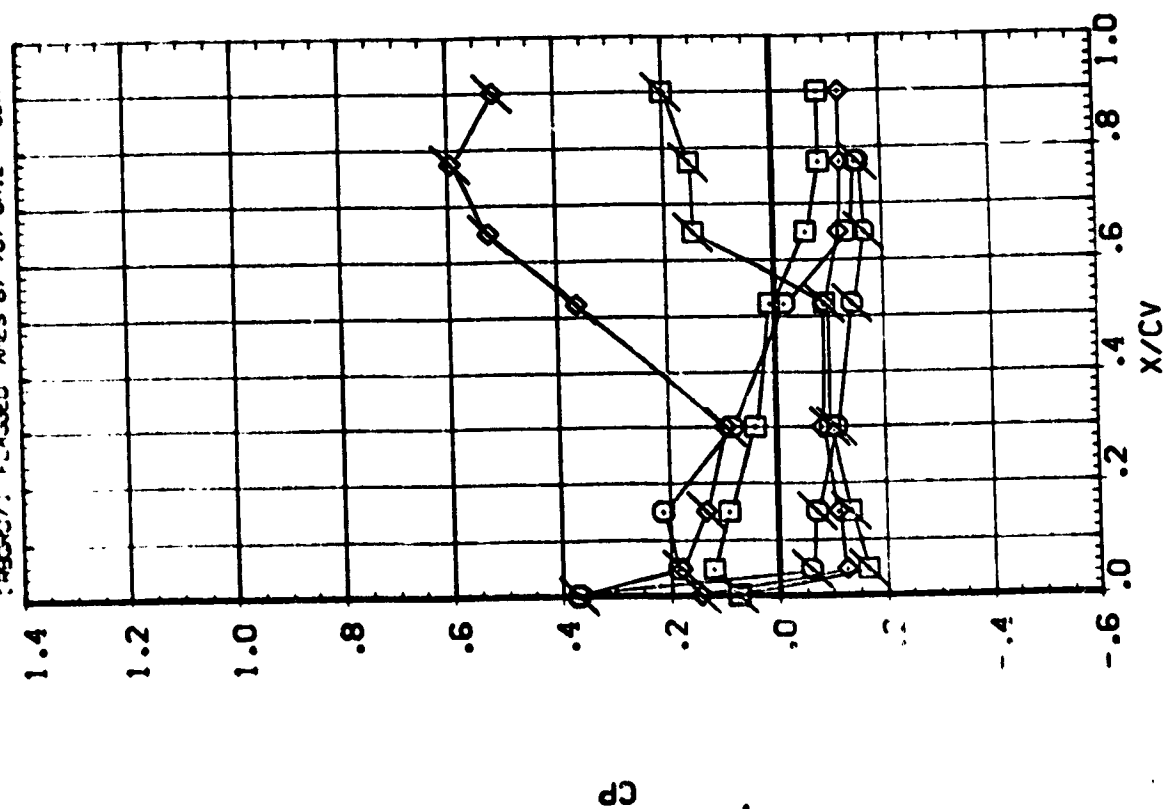
PARAMETER: A.15
20.000 2.000
.000 2.000

ALPHA
ELEVON

S.480 Z/B. BETA MACH
.158 6.240 2.498
.316
.600

LEFT VERTICAL
RIGHT VERTICAL

DATA SET SYMBOL CONFIGURATION DESCRIPTION
:RBCV7: OPEN APES 87-707 CA12 C2A
:RBCV7: FLAGGED APES 87-707 CA12 C2A



ALPHA
ELEVON

70.000
.000

RJ001R
RJ01R

BETA
6.240

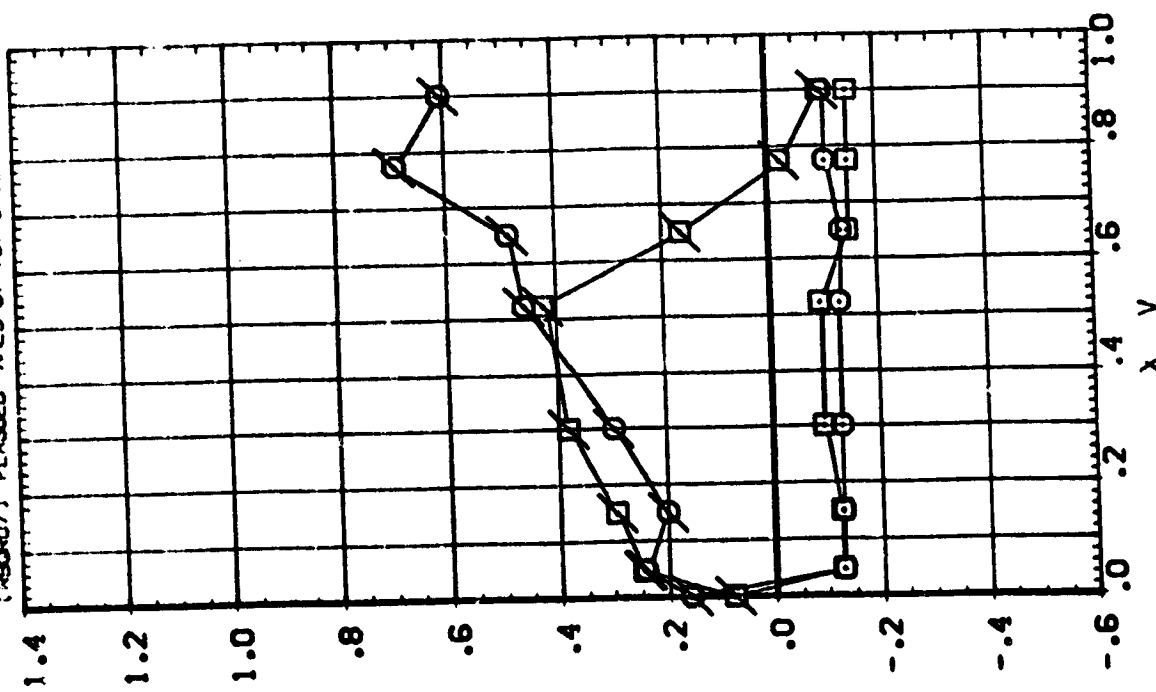
MACH
2.498

Z/BV
.84C
.925

SV-00
01

LEFT VERTICAL
RIGHT VERTICAL

DATA SET SYMBOL CONFIGURATION DESCRIPTION
(RECVJ7) OPEN APES 87-707 CA12 Q2A
(R08007) FLAGGED APES 87-707 CA12 Q2A



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

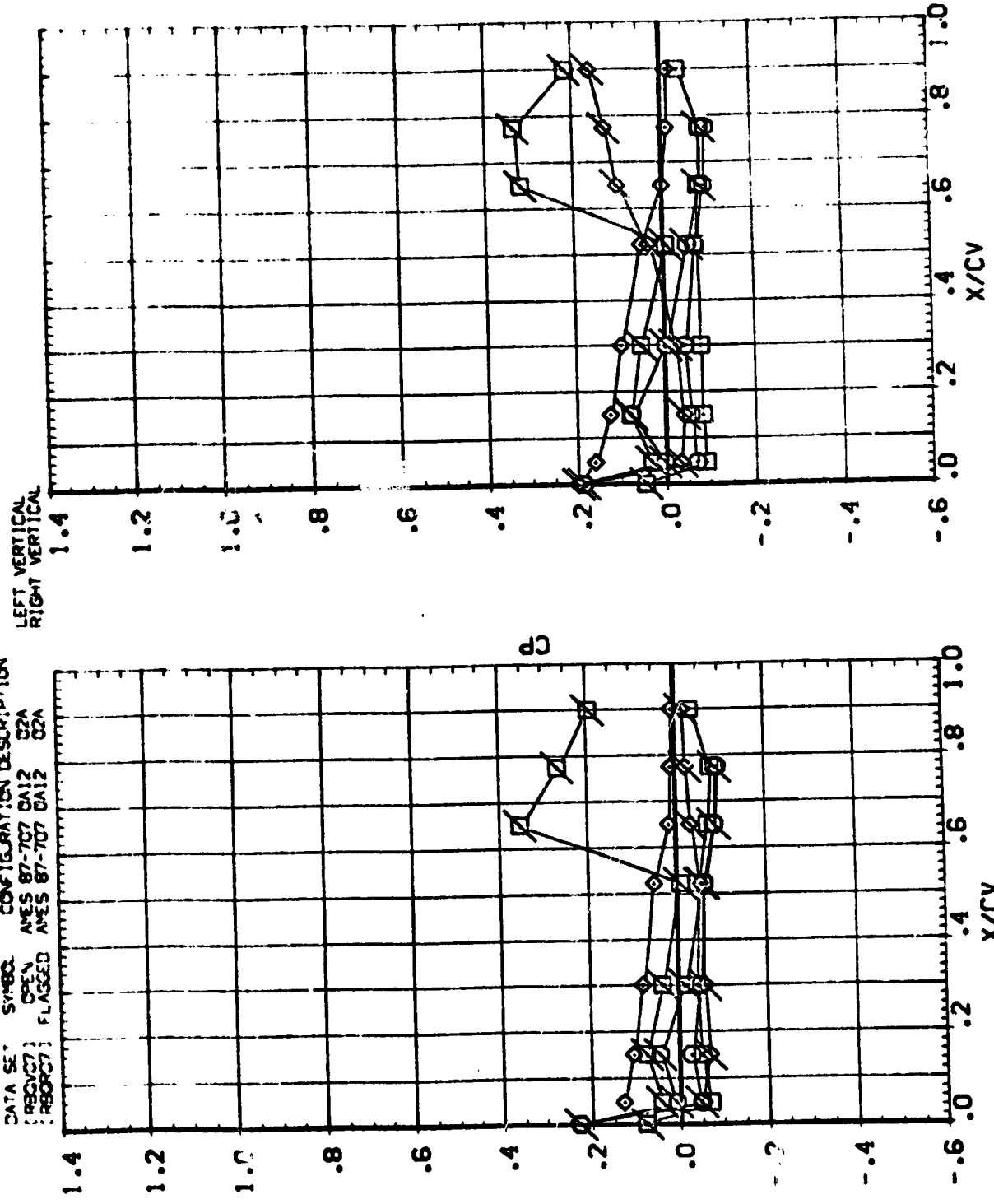
PARAMETRIC VALUES
 ALPHA 20.000 RUDER 20.000
 ELEVON 20.000

SYMBOL 1/31
 .158
 .316
 .600

BE'A 3.501
 -6.710
 -3.440

MAC=

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 :RBOVC7 OPEN AYES 87-707 DA12 C2A
 :RBOVC7 FLAGGED AYES 87-707 DA12 C2A



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES

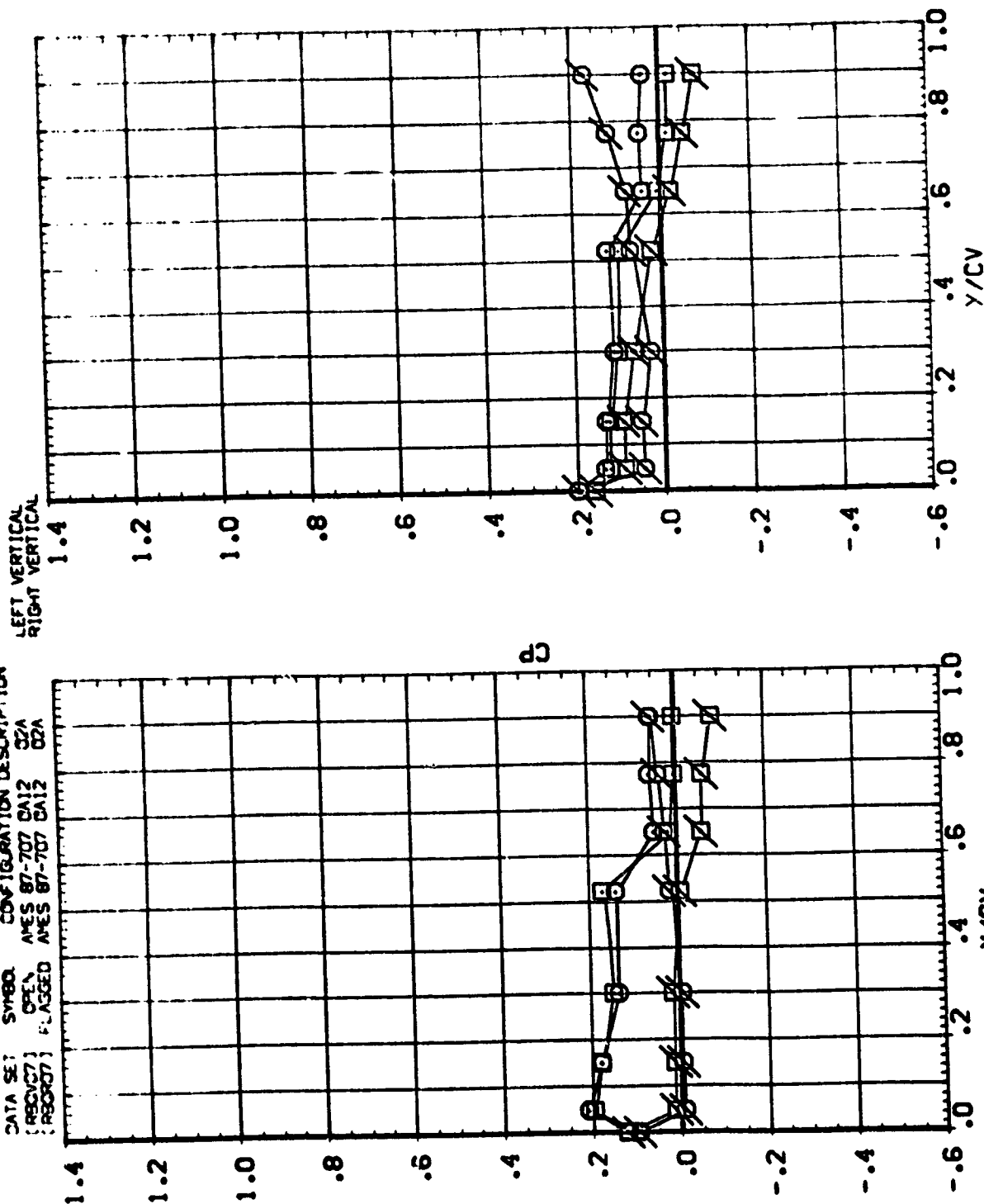
ALPHA	20.000	RUDER	20.000
ELEVON	.000	RUFLR	40.000

SYMBOL Z/BV BETA MACH

○	.840	-6.710	3.501
□	.925	-3.440	

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RBC027)	OPEN	AMES 87-707	DA12	02A
(RBC027)	FLAGGED	AMES 87-707	DA12	02A



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

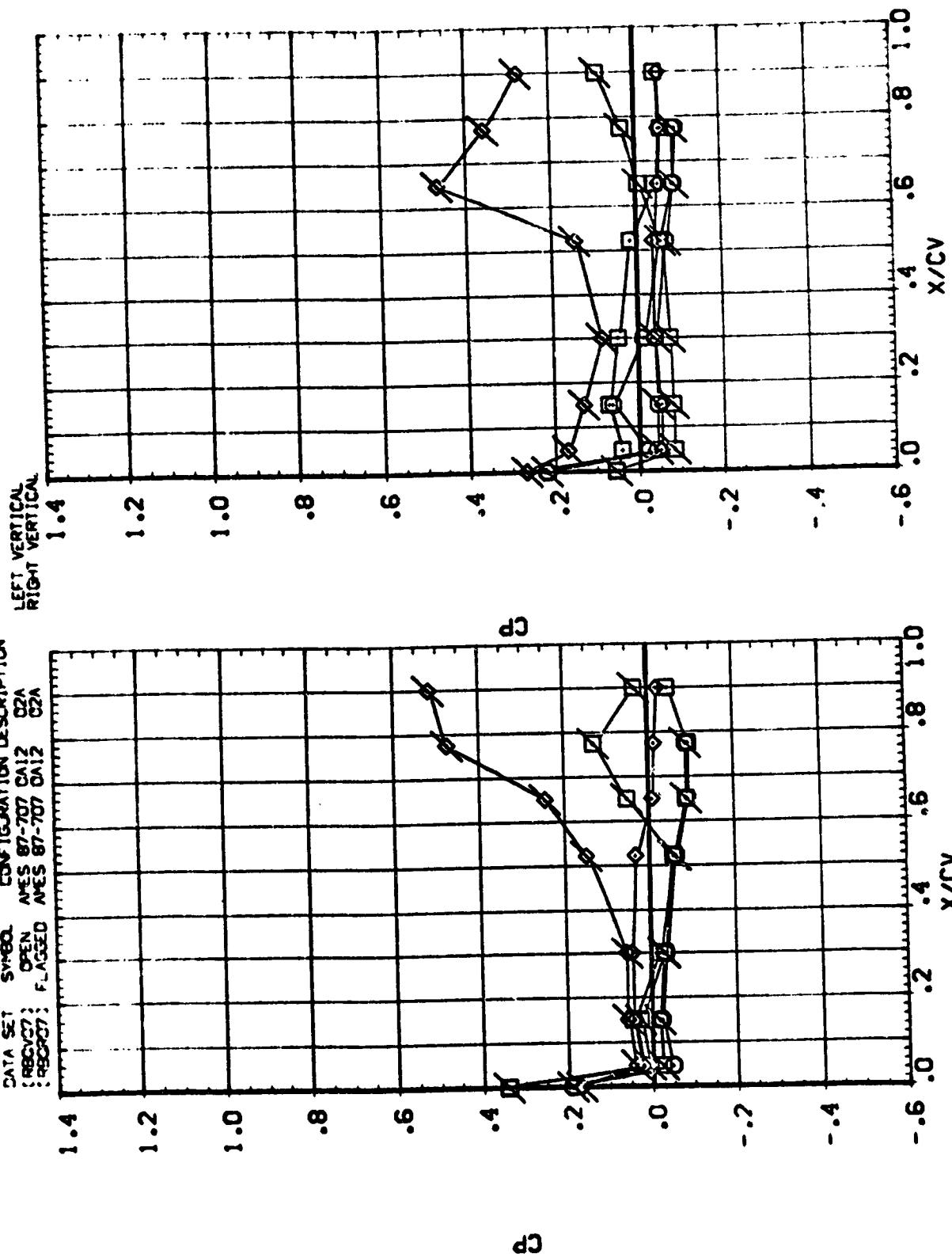
==

SYNCH 2/3: .58
 .316
 .600

BETA .50 3.50:
 3.16C

PARAMETRIC VALUES
 ALPHA 20.00C 20.00C 20.00C
 ELEVON .00C 20.00C 45.00C

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RBCV77) OPEN AMES 87-707 CA12 C2A
 (RBCV77) FLAGGED AMES 87-707 CA12 C2A



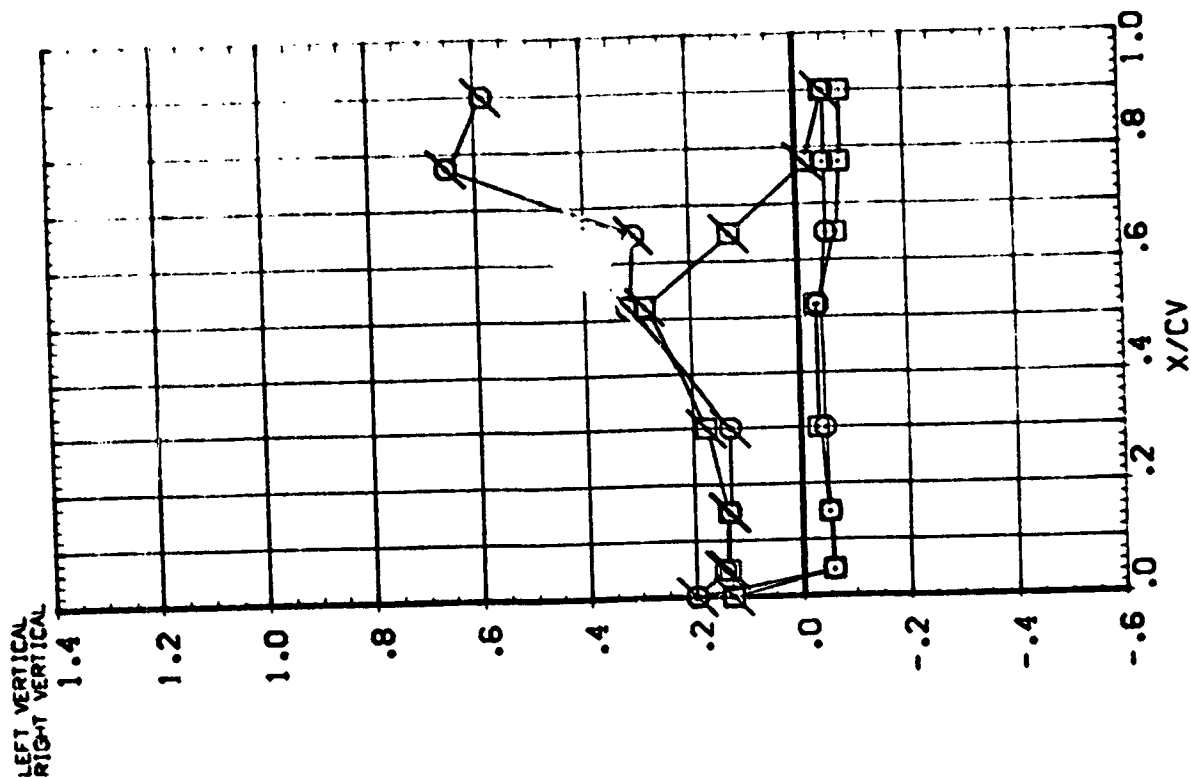
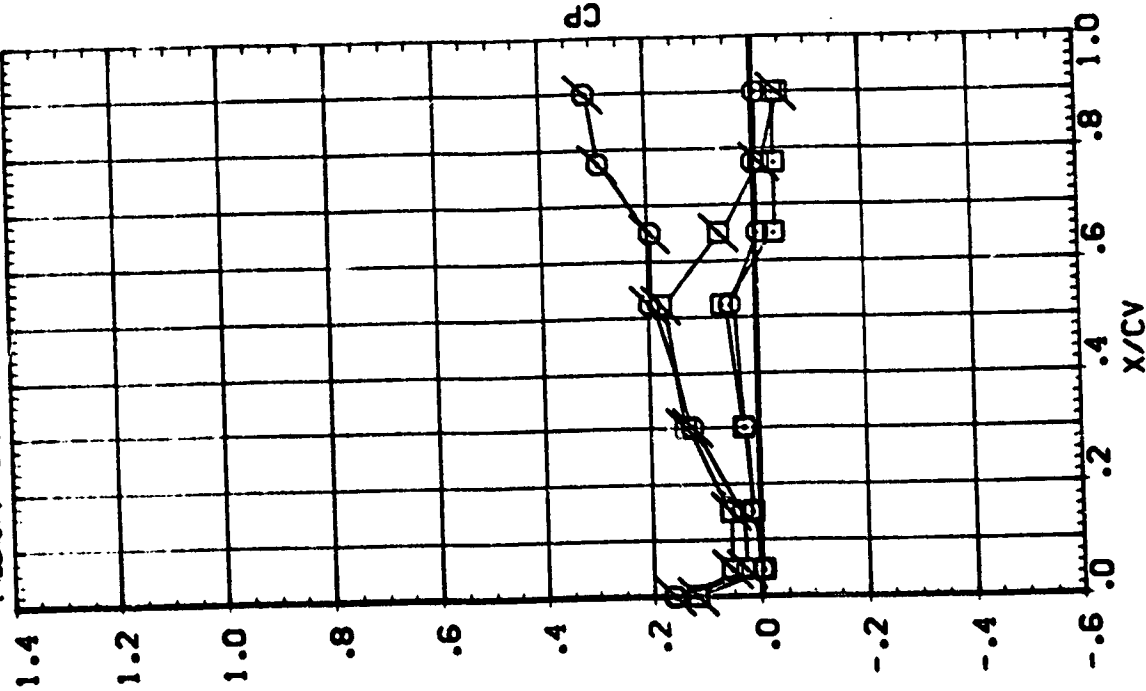
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETER VALUES
 20.000 2.000 20.000
 20.000 2.000 20.000

ALPHA
 ELEVON

SYMBOL Z/BY BETA MACH
 .842 .150 3.501
 .975 3.160

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RECV07) OPEN AVES 87-707 CA12 C2A
 (RECV07) FLAGGED AVES 87-707 CA12 C2A

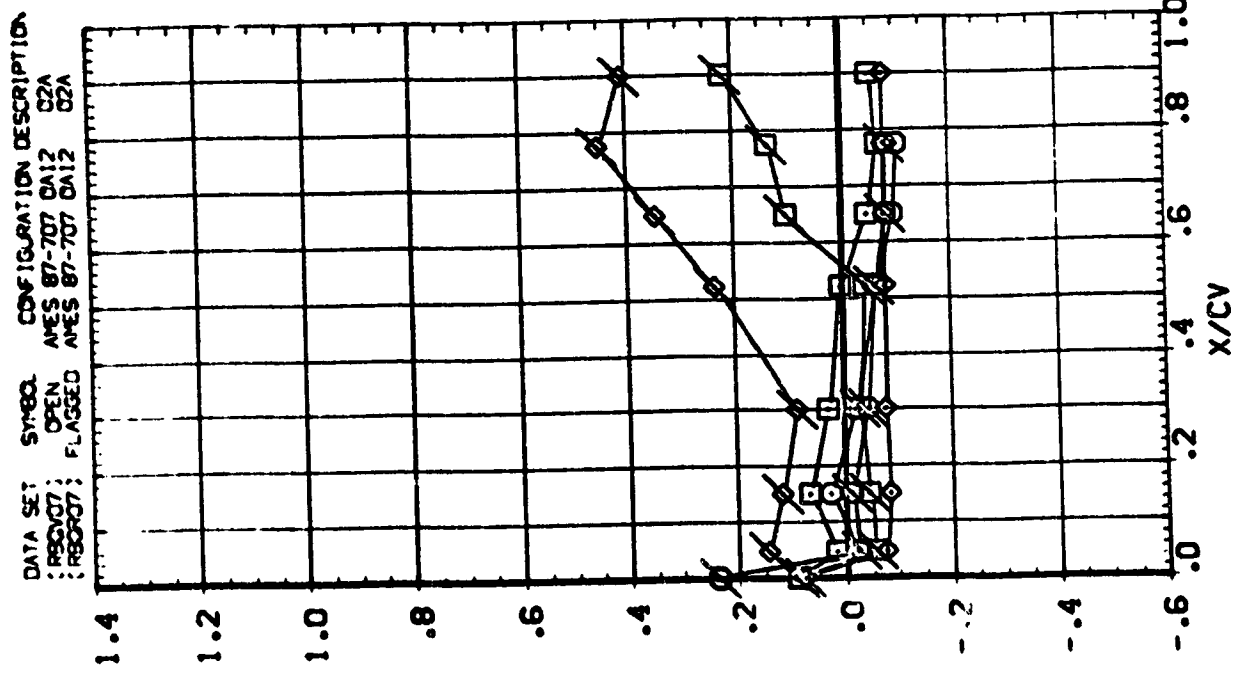


CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 ALPHA 20.000 RUDDER .20.000
 ELEVON .000 RUDLER 45.000

SYMBOL L/BV BETA MACH
 .158 6.47C 3.501
 .316
 .600

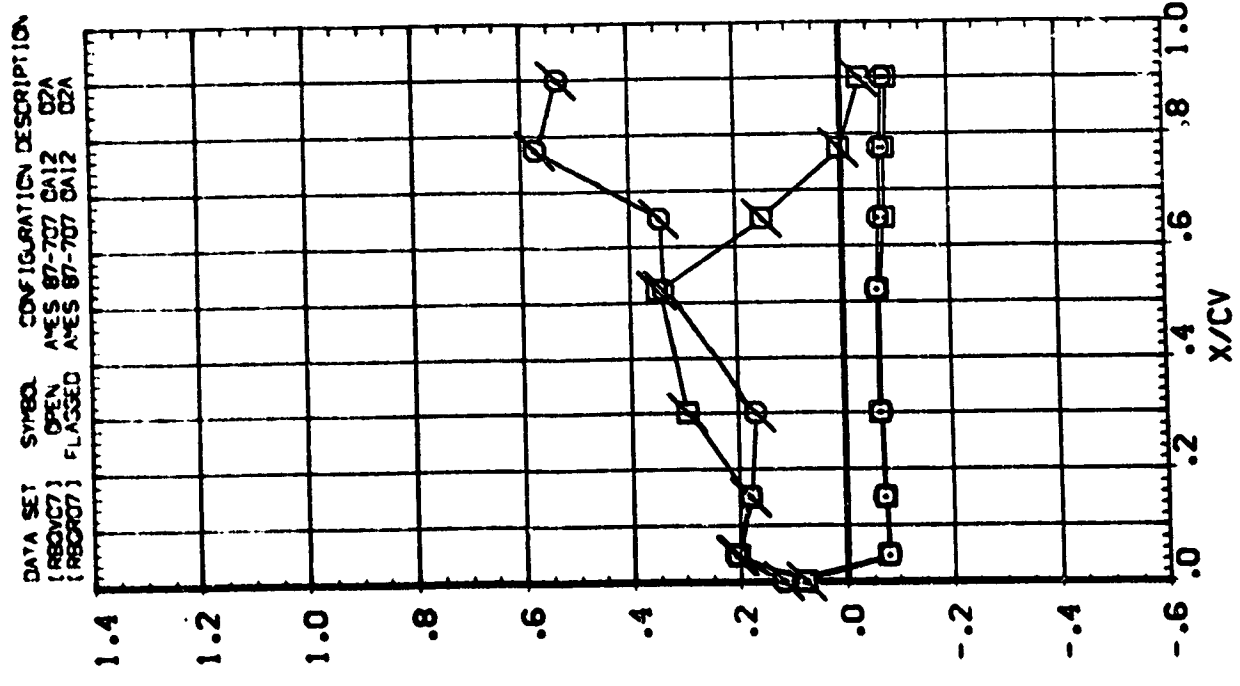
LEFT VERTICAL
 RIGHT VERTICAL



PARAMETRIC VALUES
 20.000 RUDDER 20.000
 20.000 RUDDER 40.000
 20.000 RUDDER 40.000

SYMBOL Z/BV BETA WACH
 .84C 6.470 3.50:
 .925

LEFT VERTICAL
 RIGHT VERTICAL



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

SYMBOL Z/B. .158
 .316
 .600

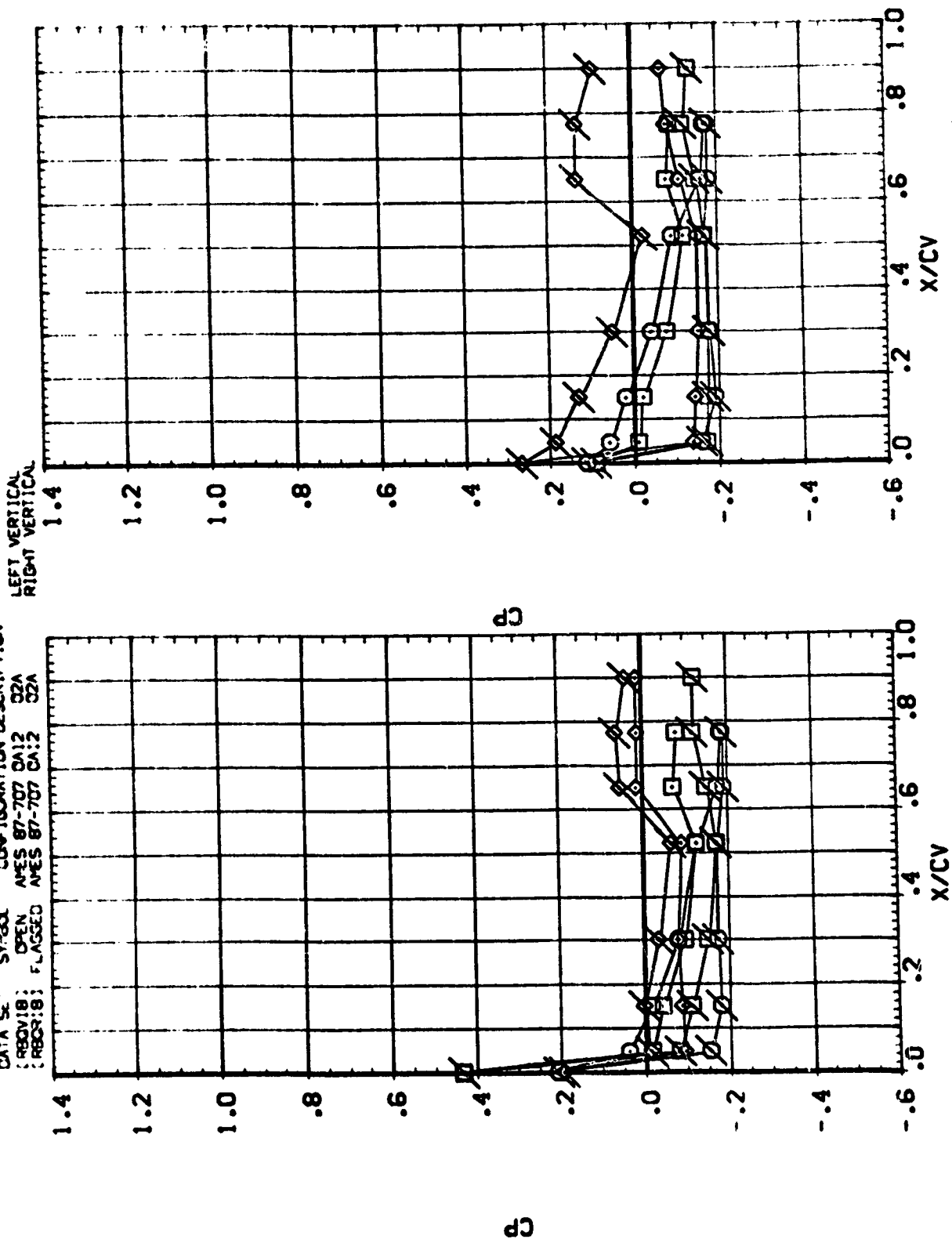
BETA -6.48C
 -3.31C

WACH 2.498

ALPHA
 ELEVON

PARAMETRIC VALUES
 30.00C R.00R
 .00C R.00L 40.00C

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REQV18) OPEN AYES 87-707 CA12 02A
 (REQV18) FLAGGED AYES 87-707 CA12 02A



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 30.000 30.000 30.000
 30.000 30.000 30.000
 30.000 30.000 30.000

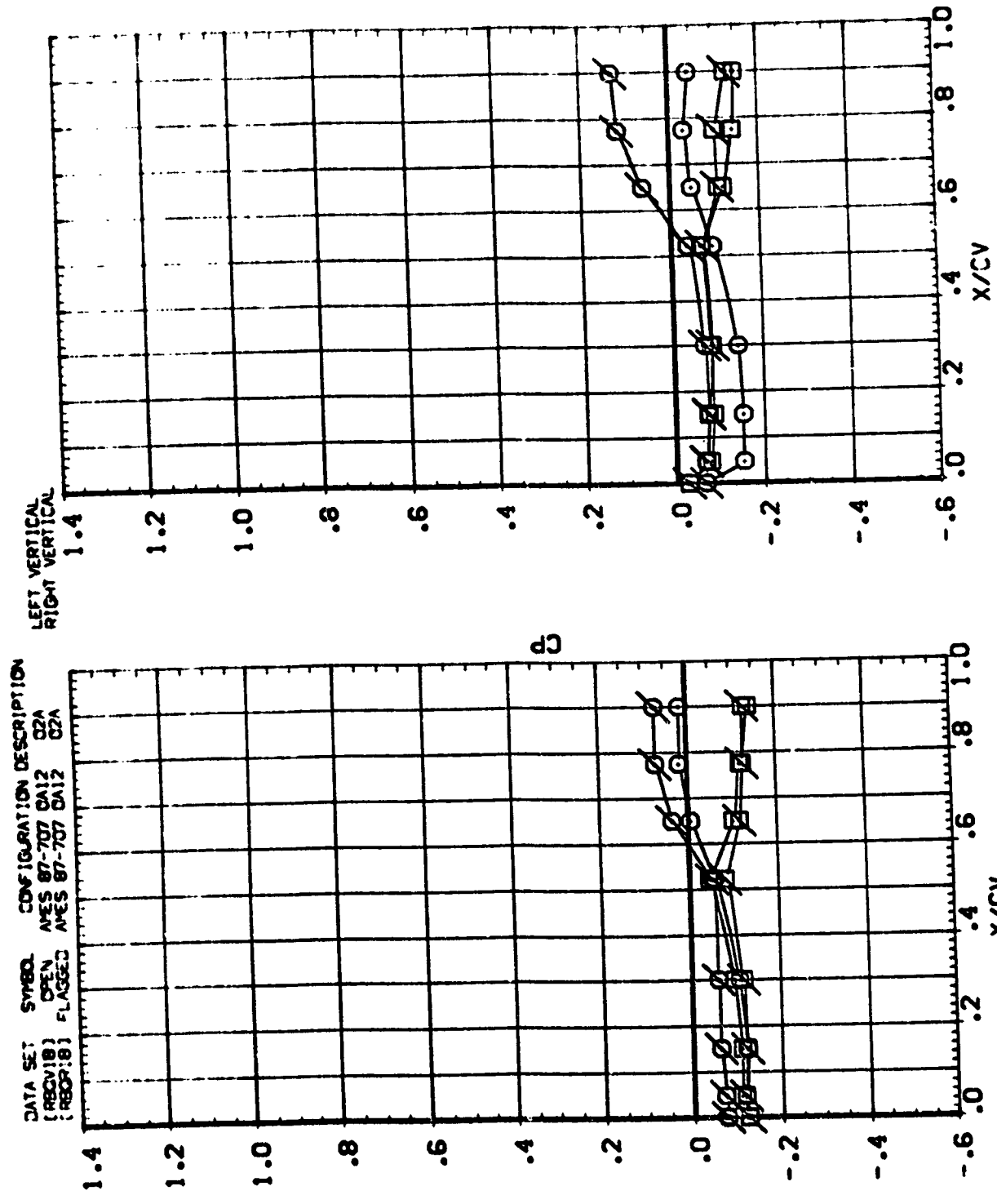
ALPHA
 ELEVON

BETA
 -6.480
 -3.310

SYMBOL
 Z/BV
 .84C
 .925

MACM
 2.498

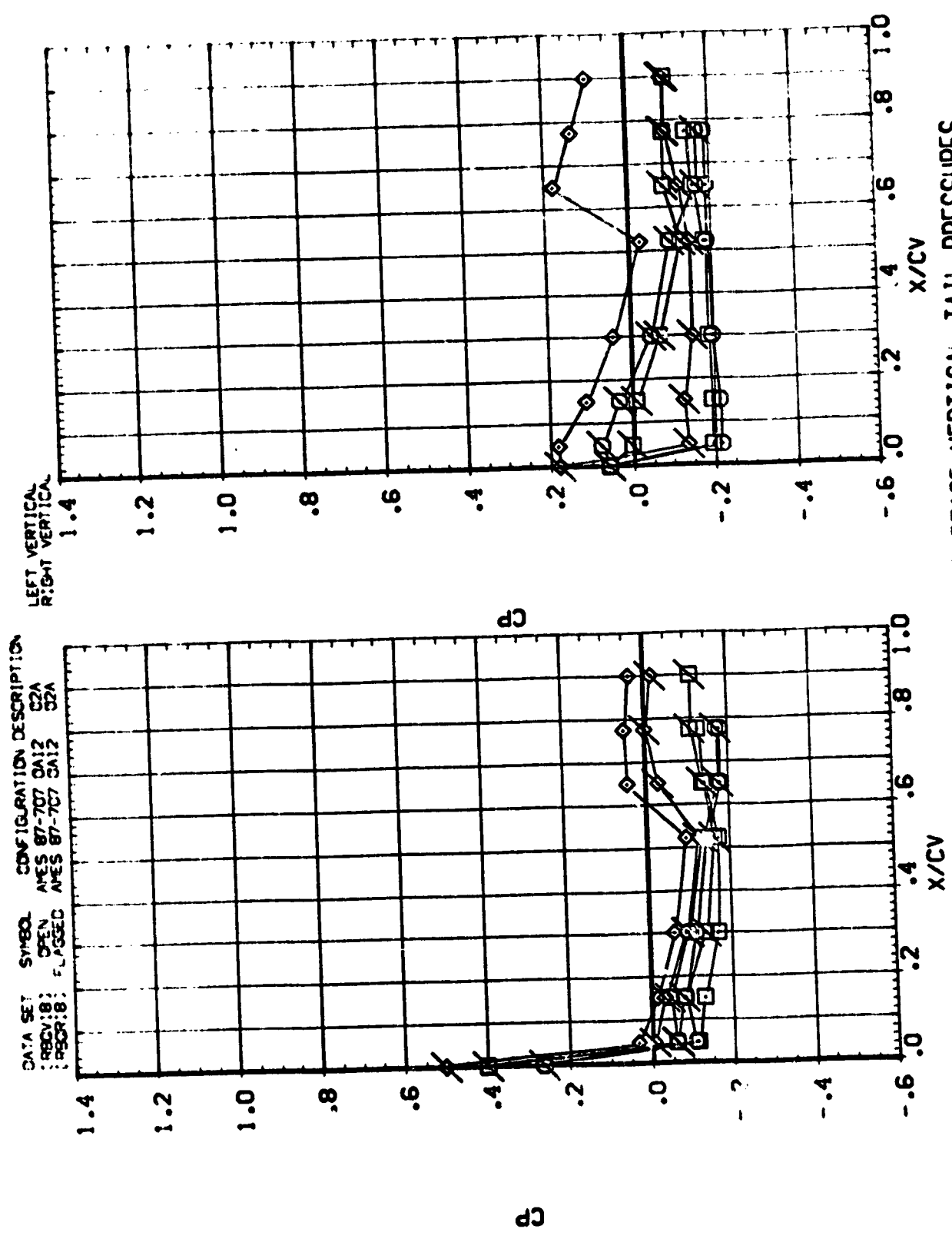
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REGVIB) OPEN AMES 87-707 OA12 O2A
 (REOP:8) FLAGGED AMES 87-707 OA12 O2A



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 ALPHA 30.000 RUDER 1.000
 ELEVON 2.000

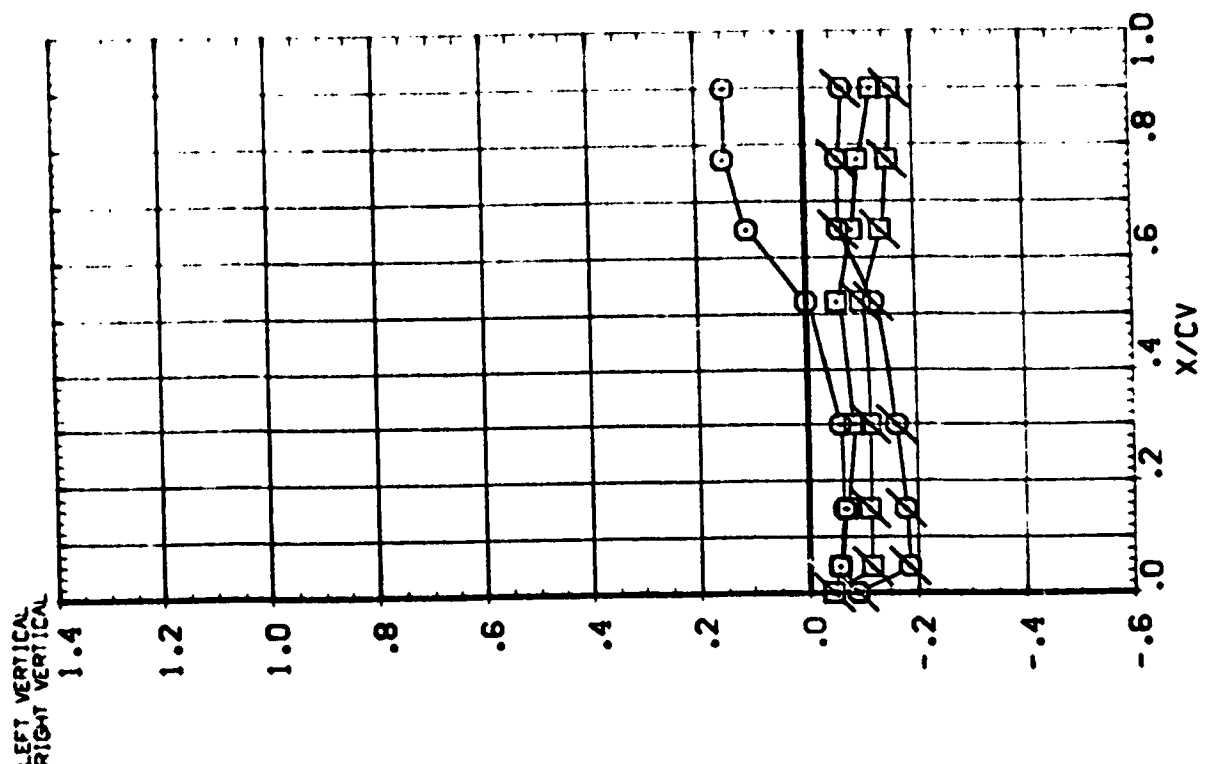
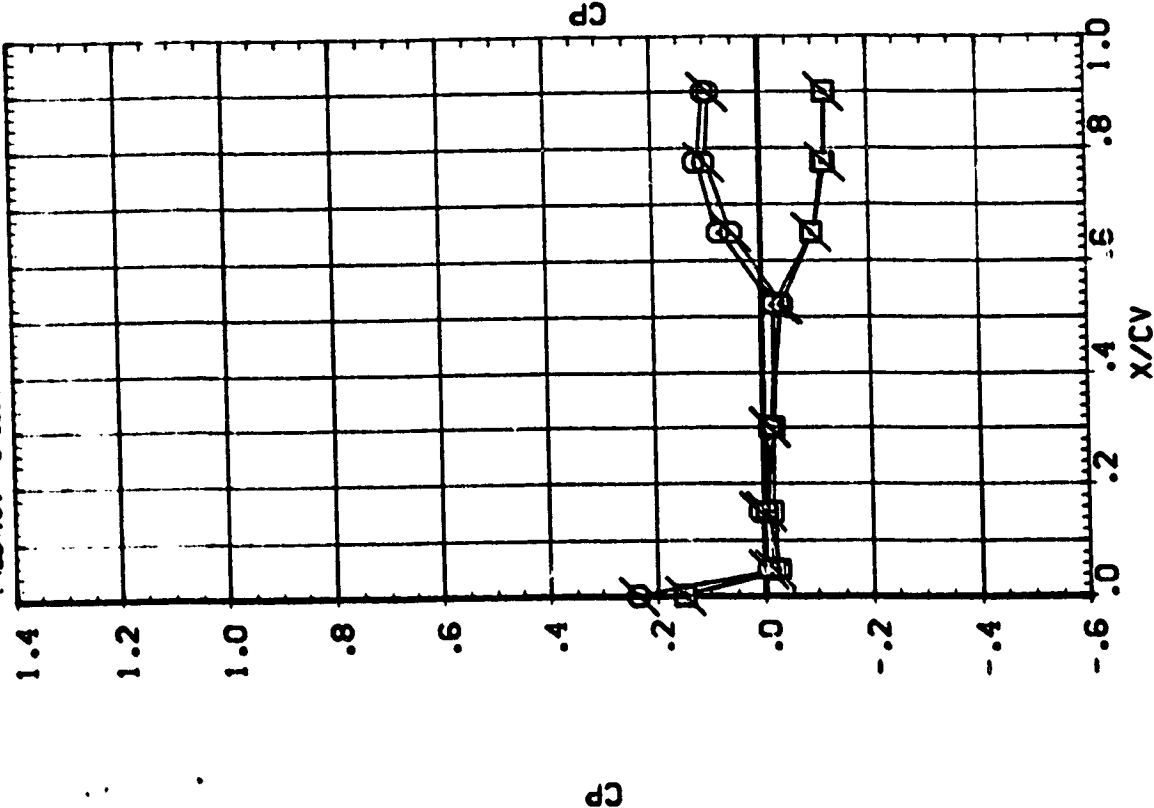
SYMBOL 1/3, .158 .316 600
 BE'A .130 3.000
 MACH 2.498



PARAMETER VALUES
 ALPHA 30.000 2.0000
 ELEVON 1.000 2.0000 45.000

SYMBOL Z/B₁ BETA MACH
 0.045 3.062 2.498
 0.975

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RECV:8) OPEN ANES 87-707 OA12 O2A
 (RECV:8) FLAGGED ANES 87-707 OA12 O2A

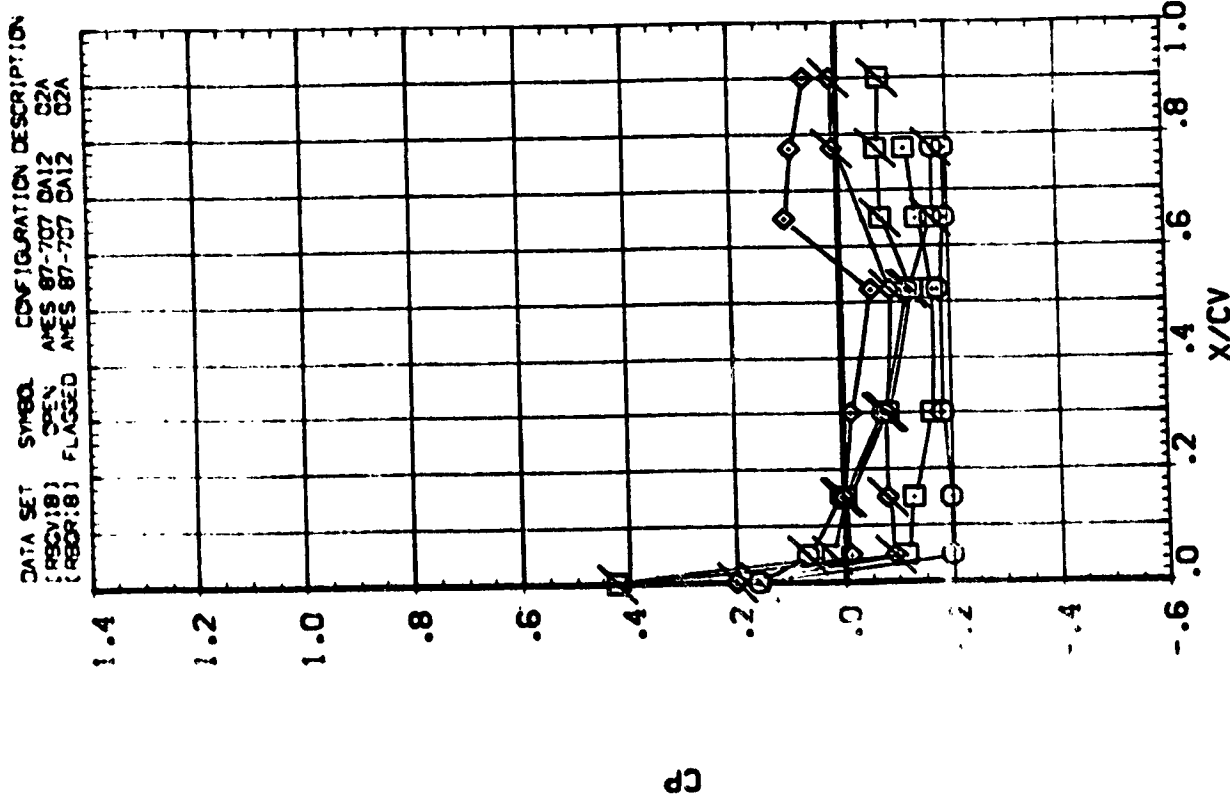


CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 ALPHA 30.000 RUDER .000
 ELEVON .000 RUDER 40.000

SYMBOL Z/BV BETA MACH
 .158 6.240 2.498
 .316
 .600

LEFT VERTICAL
 RIGHT VERTICAL

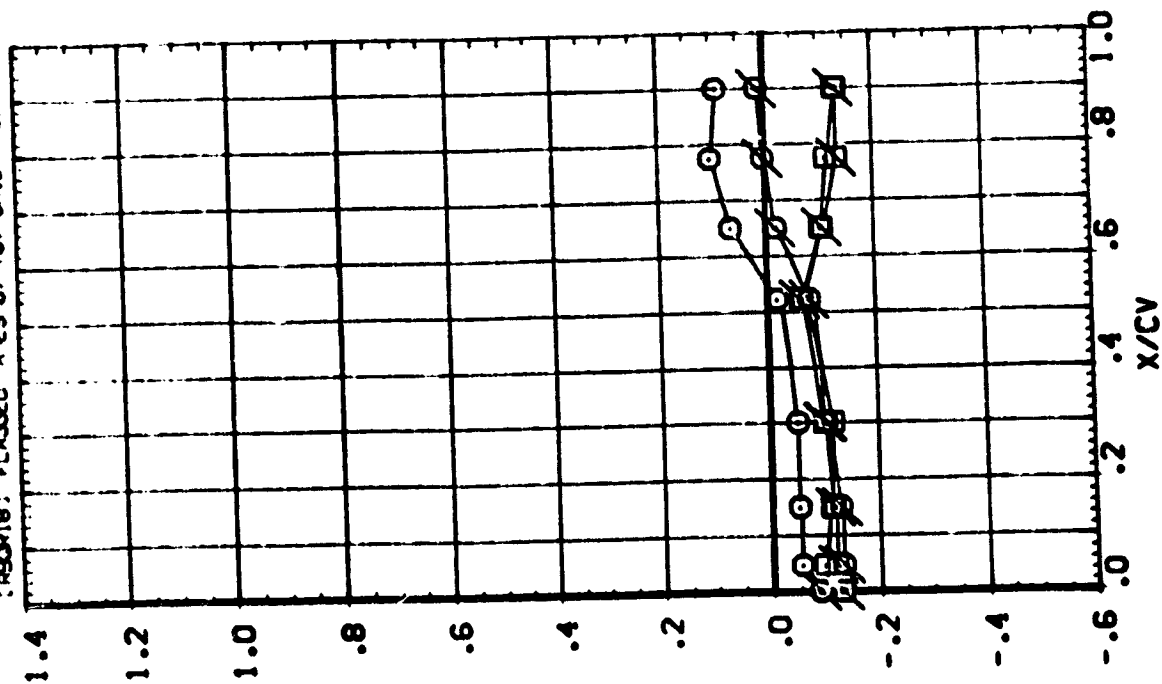


DATA: 21.5 1.4.15
 30.000 2.000 40.000
 ALPHA 2.000
 ELEVON 2.000

SYMBO: 2/8V .84C .925
 BETA 6.24C 2.498

LEFT VERTICAL
 RIGHT VERTICAL

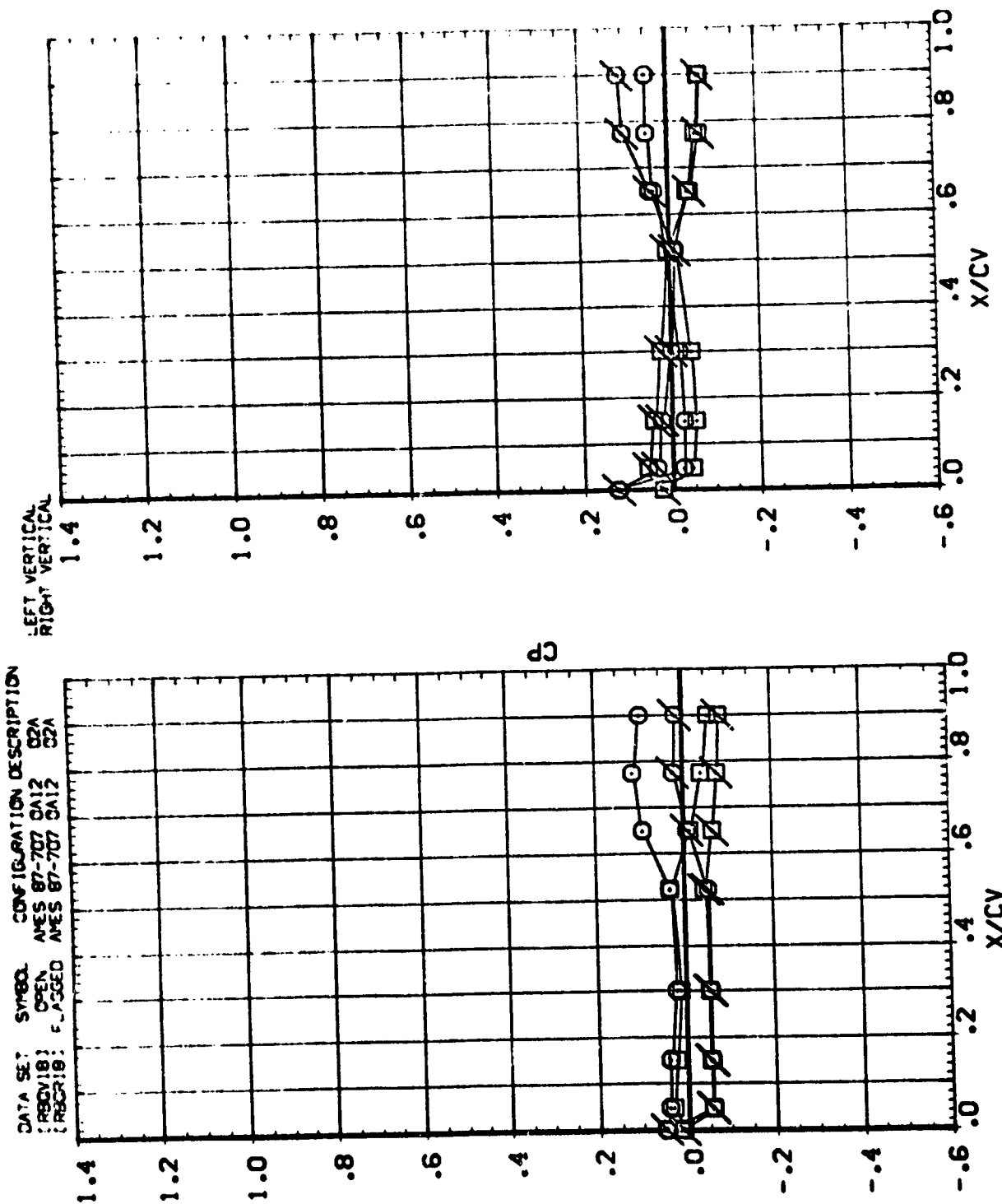
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 : RECV18: OPEN AYES 87-707 0A12 02A
 : RECV18: FLAGGED AYES 87-707 0A12 02A



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES
 PAGE 878

PARAMETER VALUES
 ALPHA 20.000 20.000 20.000
 ELEVON 10.000 10.000 10.000

SYMBOLS
 1.58 3.15 6.30 12.60 25.20 50.40 100.80 201.60 403.20 806.40 1612.80 3225.60 6451.20 12902.40 25804.80 51609.60 103219.20 206438.40 412876.80 825753.60 1651507.20 3303014.40 6606028.80 13212057.60 26424115.20 52848230.40 105696460.80 211392921.60 422785843.20 845571686.40 1691143372.80 3382286745.60 6764573491.20 13529146982.40 27058293964.80 54116587929.60 108233175859.20 216466351718.40 432932703436.80 865865406873.60 1731730813747.20 3463461627494.40 6926923254988.80 13853846509977.60 27707693019955.20 55415386039910.40 110830772079820.80 221661544159641.60 443323088319283.20 886646176638566.40 1773292353277132.80 3546584706554265.60 7093169413108531.20 14186338826217062.40 28372677652434124.80 56745355304868249.60 113490710609736499.20 226981421219472998.40 453962842438945996.80 907925684877891993.60 1815851369755783987.20 3631702739511567974.40 7263405479023135948.80 14526810958046271897.60 29053621916092543795.20 58107243832185087590.40 116214487664370175180.80 232428975328740350361.60 464857950657480700723.20 929715901314961401446.40 1859431802629922802892.80 3718863605259845605785.60 7437727210519691211571.20 14875454421039382423142.40 29750908842078764846284.80 59501817684157529692569.60 119003635368315059385139.20 238007270736630118770278.40 476014541473260237540556.80 952029082946520475081113.60 1904058165893040950162227.20 3808116331786081900324454.40 7616232663572163800648908.80 15232465327144327601297817.60 30464930654288655202595635.20 60929861308577310405191270.40 121859722617154620810382540.80 243719445234309241620765081.60 487438890468618483241530163.20 974877780937236966483060326.40 1949755561874473932966120652.80 3899511123748947865932241305.60 7799022247497895731864482611.20 15598044494995791463728965222.40 31196088989991582927457930444.80 62392177979983165854915860889.60 124784355959966331709831721779.20 249568711919932663419663443558.40 499137423839865326839326887116.80 998274847679730653678653774233.60 1996549695359461307357307548467.20 3993099390718922614714615096934.40 7986198781437845229429230193868.80 15972397562875690458858460387737.60 31944795125751380917716920775475.20 63889590251502761835433841550950.40 127779180503005523670867683101900.80 255558361006011047341735366203801.60 511116722012022094683470732407603.20 1022233444024044189366941464815206.40 2044466888048088378733882929630412.80 4088933776096176757467765859260825.60 8177867552192353514935531718521651.20 16355735104384707029871063437043302.40 32711470208769414059742126874086604.80 65422940417538828119484253748173209.60 130845880835077656238968507496346419.20 261691761670155312477937014992692838.40 523383523340310624955874029985385676.80 1046767046680621249911748059970771353.60 2093534093361242499823496119941542707.20 4187068186722484999646992239883085414.40 8374136373444969999293984479766170828.80 16748272746889939998587968959532341657.60 33496545493779879997175937919064683315.20 66993090987559759994351875838129366630.40 133986181975119519988703751676258733260.80 267972363950239039977407503352517466521.60 535944727900478079954815006705034933043.20 1071889455800956159909630013410069866086.40 2143778911601912319819260026820139732172.80 4287557823203824639638520053640279464345.60 8575115646407649279277040107280558928691.20 17150231292815298558554080214561117857382.40 34300462585630597117108160429122235714764.80 68600925171261194234216320858244471429529.60 137201850342522388468432641716488942859059.20 274403700685044776936865283432977885718118.40 548807401370089553873730566865955771436236.80 1097614802740179107747461133731911542872473.60 2195229605480358215494922267463823085744947.20 4390459210960716430989844534927646171489894.40 8780918421921432861979689069855292342979788.80 17561836843842865723959378139710584685959577.60 35123673687685731447918756279421169371919155.20 70247347375371462895837512558842338743838310.40 140494694750742925791675025117684677487676620.80 280989389501485851583350050235369354975353241.60 561978779002971703166700100470738709950706483.20 1123957558005943406333400200941477419901412966.40 2247915116011886812666800401882954839802825932.80 4495830232023773625333600803765909679605651865.60 8991660464047547250667201607531819359211303731.20 17983320928095094501334403215063638718422607462.40 35966641856190189002668806430127277436845214924.80 71933283712380378005337612860254554873690429849.60 143866567424760756010675225720509109747380859699.20 287733134849521512021350451441018219494761719398.40 575466269699043024042700902882036438989523438796.80 1150932539398086048085401805764072877979046877593.60 2301865078796172096170803611528145755958093755187.20 4603730157592344192341607223056291511916187510374.40 9207460315184688384683214446112583023832375020748.80 18414920630369376769366428892225166047664750041497.60 36829841260738753538732857784450332095329500082995.20 73659682521477507077465715568900664190659000165990.40 147319365042955014154931431137801328381318000331980.80 294638730085910028309862862275602656762636000663961.60 589277460171820056619725724551205313525272001327923.20 1178554920343640113239451449102410627050544002655846.40 2357109840687280226478902898204821254101088005311692.80 4714219681374560452957805796409642508202176010623385.60 9428439362749120905915611592819285016404352021246771.20 18856878725498241811831223185638570032808704042493542.40 37713757450996483623662446371277140065617408084987084.80 75427514901992967247324892742554280131234816169974169.60 150855029803985934494649785485108560262469632339948339.20 301710059607971868989299570970217120524939264679896678.40 603420119215943737978599141940434241049878529359793356.80 1206840238431887475957198283880868482099757058719586713.60 2413680476863774951914396567761736964199514117439173427.20 4827360953727549903828793135523473928399028234878346854.40 9654721907455099807657586271046947856798056469756693708.80 19309443814910199615315172542093895713596112939513387417.60 38618887629820399230630345084187791427192225879026774835.20 77237775259640798461260690168375582854384451758053549670.40 154475550519281596922521380336751165708768903516107099340.80 308951101038563193845042760673502331417537807032214198681.60 617902202077126387690085521347004662835075614064428397363.20 1235804404154252775380171042694009325670151228128856794726.40 2471608808308505550760342085388018651340302456257713589452.80 4943217616617011101520684170776037302680604912515427178905.60 9886435233234022203041368341552074605361209825030854357811.20 19772870466468044406082736683104149210722419650061708715622.40 39545740932936088812165473366208298421444839300123417431244.80 79091481865872177624330946732416596842889678600246834862489.60 158182963731744355248661893464833193685779357200493669724979.20 316365927463488710497323786929666387371558714400987339449958.40 632731854926977420994647573859332774743117428801974678899916.80 1265463709853954841989295147718665549486234857603949357799833.60 2530927419707909683978590295437331098972469715207898715599667.20 5061854839415819367957180590874662197944939430415797431199334.40 10123709678831638735914361181749324395889878860831594862398668.80 20247419357663277471828722363498648791779757721663189724797337.60 40494838715326554943657444726997297583559515443326379449594675.20 80989677430653109887314889453994595167119030886652758899189350.40 161979354861306219774629778907989190334238061773305517798378700.80 323958709722612439549259557815978380668476123546611035596757401.60 647917419445224879098519115631956761336952247093222071193514803.20 1295834838890449758197038231263913522673904494186444142387029606.40 2591669677780899516394076462527827045347808988372888284774059212.80 5183339355561799032788152925055654090695617976745776569548118425.60 10366678711123598065576305850111308181391235953491553139096236851.20 20733357422247196131152611700222616362782471906983106278192473702.40 41466714844494392262305223400445232725564943813966212556384947404.80 82933429688988784524610446800890465451129887627932425112769894809.60 165866859377977569049220893601780930902259775255864850225539789619.20 331733718755955138098441787203561861804519550511729700451079579238.40 663467437511910276196883574407123723609039101023459400902159158476.80 1326934875023820552393767148814247447218078202046918801804318316953.60 2653869750047641104787534297628494894436156404093837603608636633907.20 5307739500095282209575068595256989788872312808187675207217273267814.40 10615479000190564419150137190513979577744625616375350414434546535628.80 21230958000381128838300274381027959155489251232750700828869093071257.60 42461916000762257676600548762055918310978502465501401657738186142515.20 84923832001524515353201097524111836621957004931002803315476372285030.40 169847664003049030706402195048223673243914009862005606630952744570060.80 339695328006098061412804390096447346487828019724011213261905489140121.60 679390656012196122825608780192894692975656039448022426523810978280243.20 1358781312024392245651217560385789385951312078896044853047621956560486.40 2717562624048784491302435120771578771902624157792089706095243913120972.80 5435125248097568982604870241543157543805248315584179412190487826241945.60 10870250496195137965209740483086315087610496631168358824380975652483891.20 21740500992390275930419480966172630175220993262336717648761951304967782.40 43481001984780551860838961932345260350441986524673435297523902609935564.80 86962003969561103721677923864690520700883973049346870595047805219871129.60 173924007939122207443355847729381041401767946098693741190095610439742259.20 347848015878244414886711695458762082803535892197387482380191220879484518.40 695696031756488829773423390917524165607071784394774964760382441758969036.80 1391392063512977659546846781835048331214143568789549929520764883517938073.60 2782784127025955319093693563670096662428287137579099859041529767035876147.20 5565568254051910638187387127340193324856574275158199718083059534071752294.40 11131136508103821276374774254680386649713148550316399436166119068143504588.80 22262273016207642552749548509360773299426297100632798872332238136287009177.60 44524546032415285105499097018721546598852594201265597744664476272574018355.20 89049092064830570210998194037443093197705188402531195489328952545148036710.40 178098184129661140421996388074886186395410376805062390978657905090296073420.80 356196368259322280843992776149772372790820753610124781957315810180592146841.60 712392736518644561687985552299544745581641507220249563914631620361184293683.20 1424785473037289123375971104599089491163283014440499127829263240722368587366.40 2849570946074578246751942209198178982326566028880998255658526481444737174732.80 5699141892149156493503884418396357964653132057761996511317052962889474349465.60 11398283784298312987007768836792715929306264115523993022634105925778948698931.20 22796567568596625974015537673585431858612528231047986045268211851557897397862.40 45593135137193251948031075347170863717225056462095972090536423703115794795724.80 91186270274386503896062150694341727434450112924191944181072847406231589591449.60 182372540548773007792124301388683454868900225848383888362145694812463179182899.20 364745081097546015584248602777366909737800451696767776724291389624926358365798.40 729490162195092031168497205554733819475600903393535553448582779249852716731596.80 1458980324390184062336994411109467638951201806787071106897165558499705433463193.60 2917960648780368124673988822218935277902403613574142213794331116999410866926387.20 5835921297560736249347977644437870555804807227148284427588662233998821733852774.40 11671842595121472498695955288875741111609614454296568855177324467997643467705548.80 23343685190242944997391910577751482223219228908593137710354648935995286935411097.60 46687370380485889994783821155502964446438457817186275420709297871990573870822195.20 93374740760971779989567642311005928892876915634372550841418595743981147741644390.40 186749481521943559979135284622011857785753831268745101682837191487962295483288780.80 373498963043887119958270569244023715571507662537490203365674382975924590966577561.60 746997926087774239916541138488047431143015325074980406731348765951849181933155123.20 1493995852175548479833082276976094862286030650149960813462697531903698363866310246.40 29879917043510969596661645539521897245720613002999216

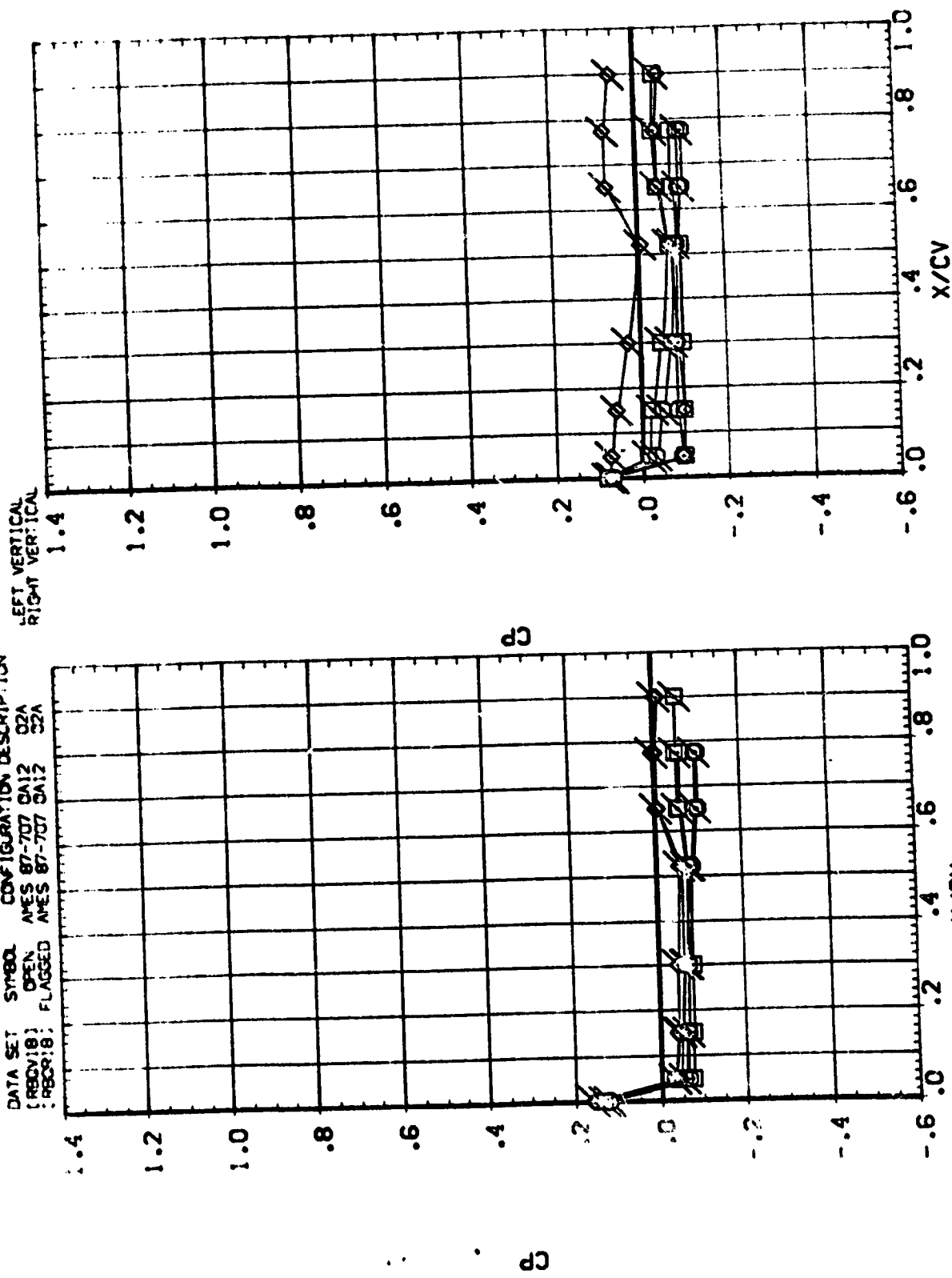


CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 ALPHA 30.000 RUDER .000
 ELEVON .000 RUDER 40.000

SYMBOL Z/BV BETA MACH
 .158 .130 3.501
 .316 3.170
 .600

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (REOV18) OPEN AVES 87-707 SA12 02A
 (REOV18) FLAGGED AVES 87-707 SA12 02A

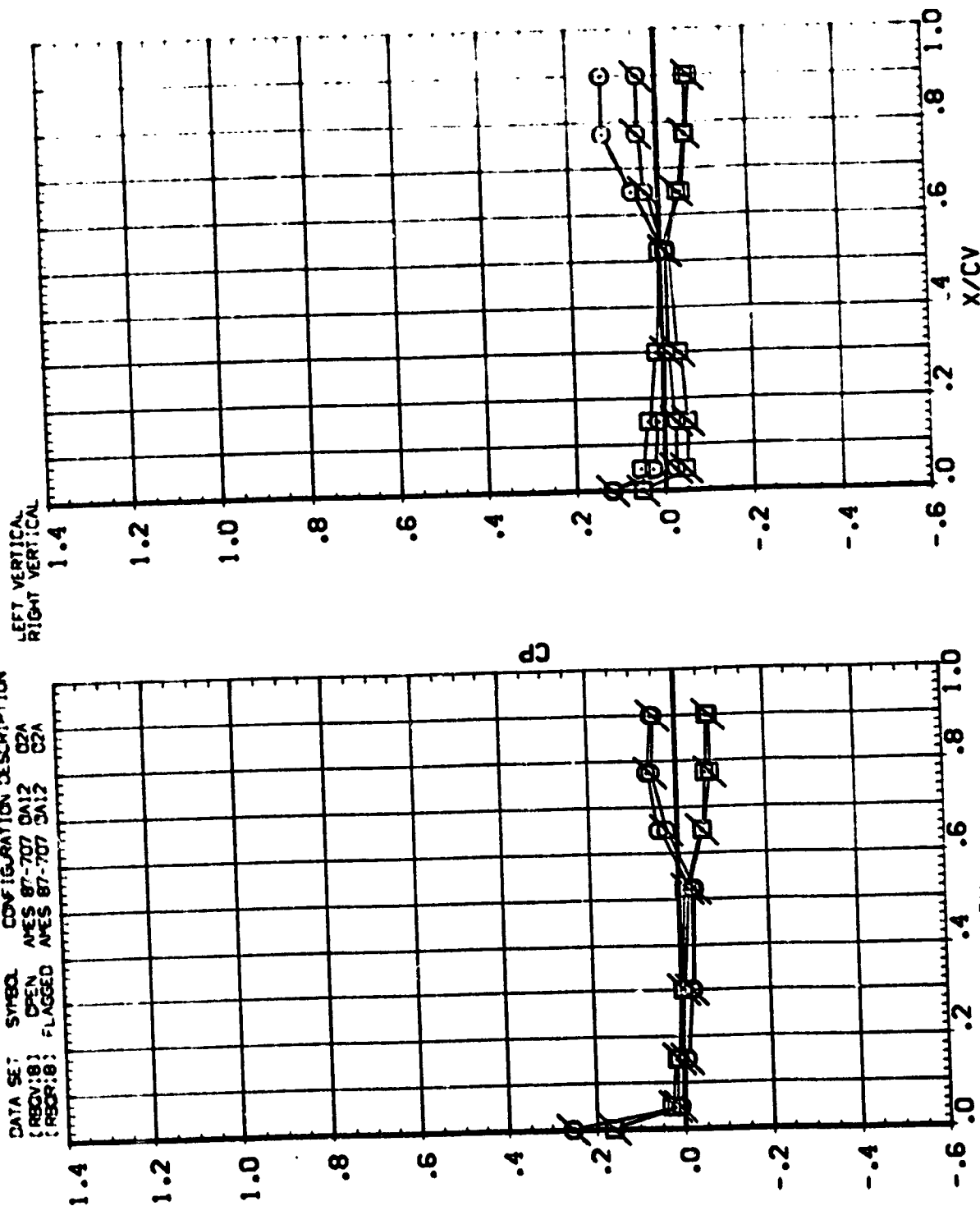


CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 ALPHA 30.000 2.000 40.000
 ELEVON .000 2.000 40.000

SYMBOL Z/BV BETA "MAC"
 .840 .130 3.501
 .925 3.170

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RECON:8) OPEN AMES 87-707 DA12 D2A
 (RECON:8) FLAGGED AMES 87-707 SA12 C2A

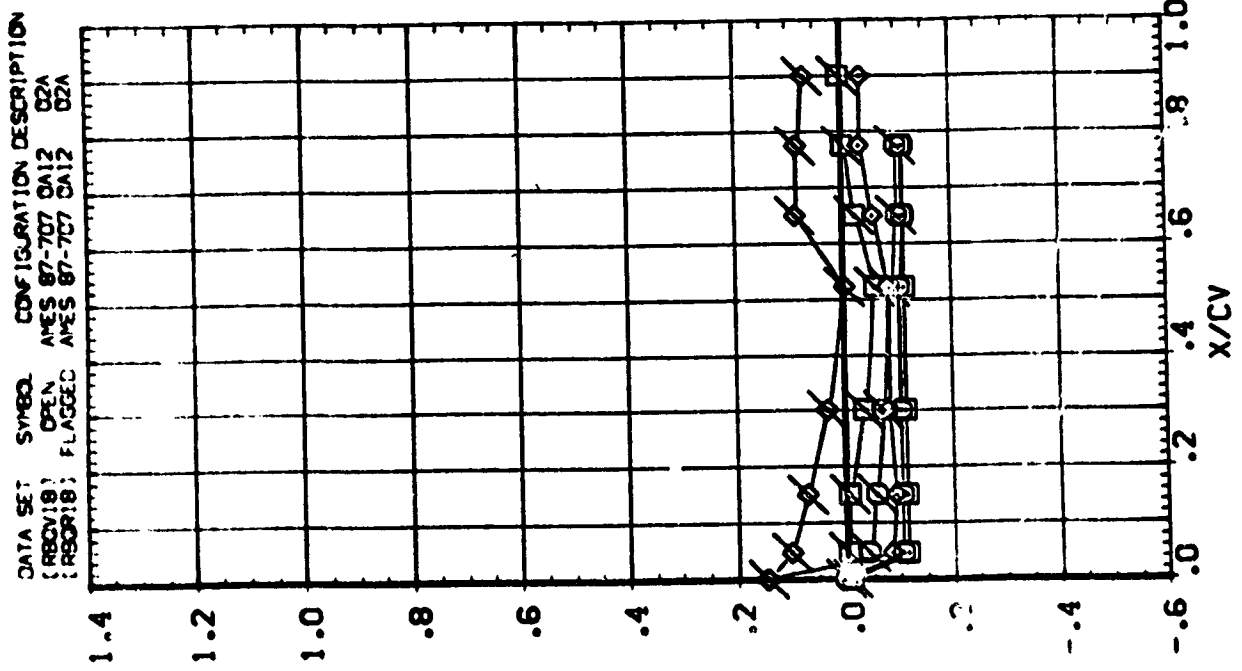


CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

ALPHA
 ELEVON
 30.000
 .000
 40.000
 RUDER
 RUDFLR

SYMBO:
 Z/BV
 .158
 .316
 .600
 BETA
 6.47C
 MACH
 3.501

LEFT VERTICAL
 RIGHT VERTICAL



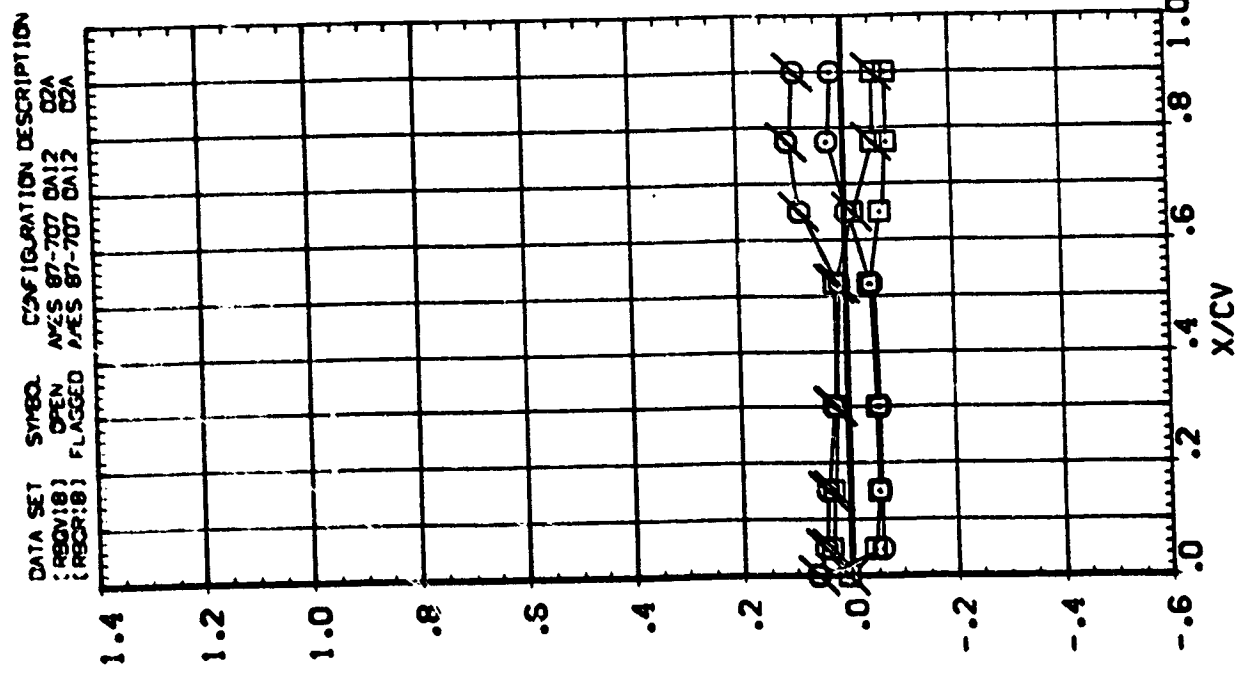
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES
 PAGE 833

PARAMETRIC VALUES
 30.000 RUDER .000
 .000 RUDER 40.000

ALPHA
 ELEVON

SYMBOL Z/BV BETA MACH
 .840 6.470 3.501
 .975

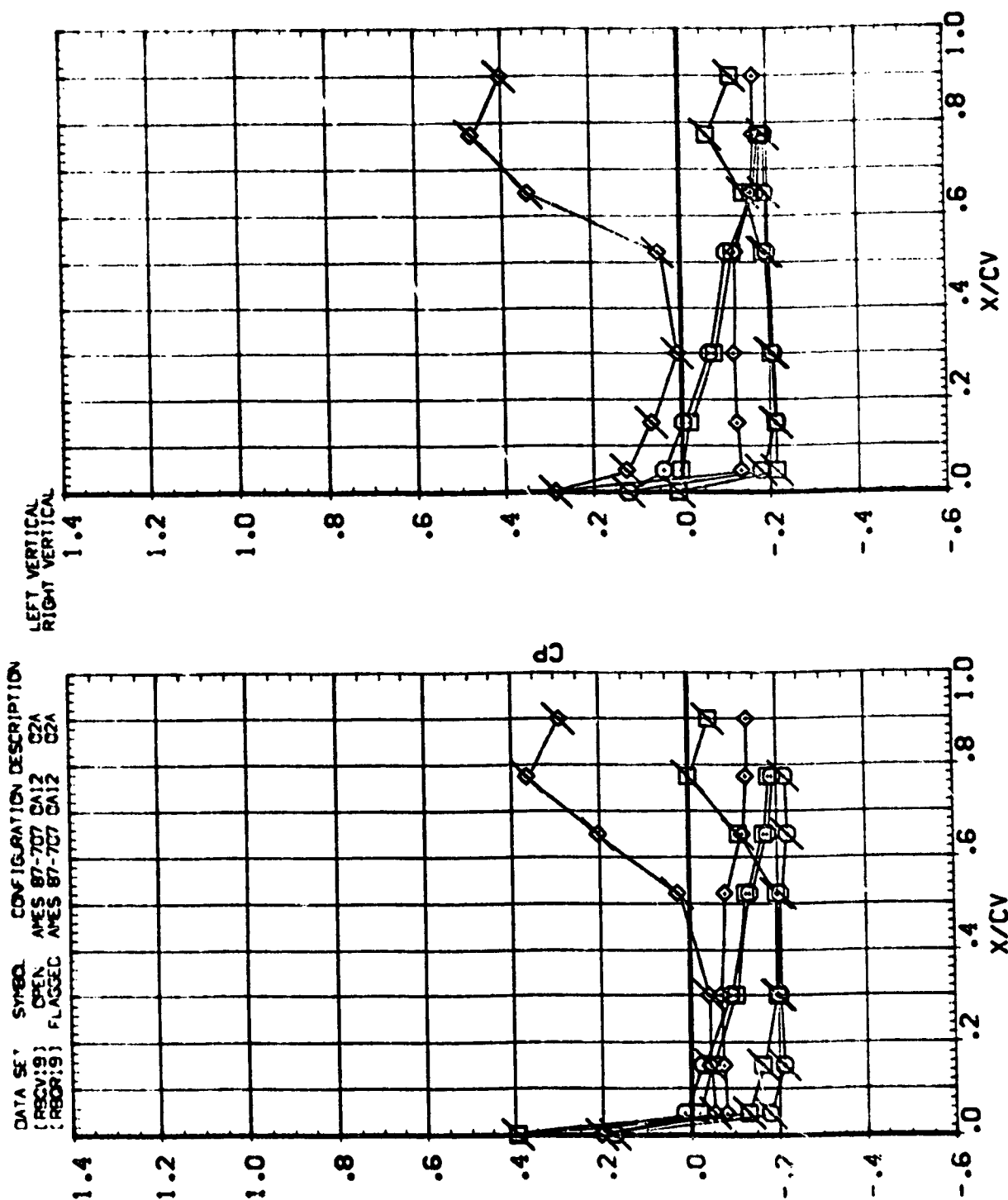
LEFT VERTICAL
 RIGHT VERTICAL



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 ALPHA 30.000 RJOER -70.000
 ELEVON .000 RJOER 40.000

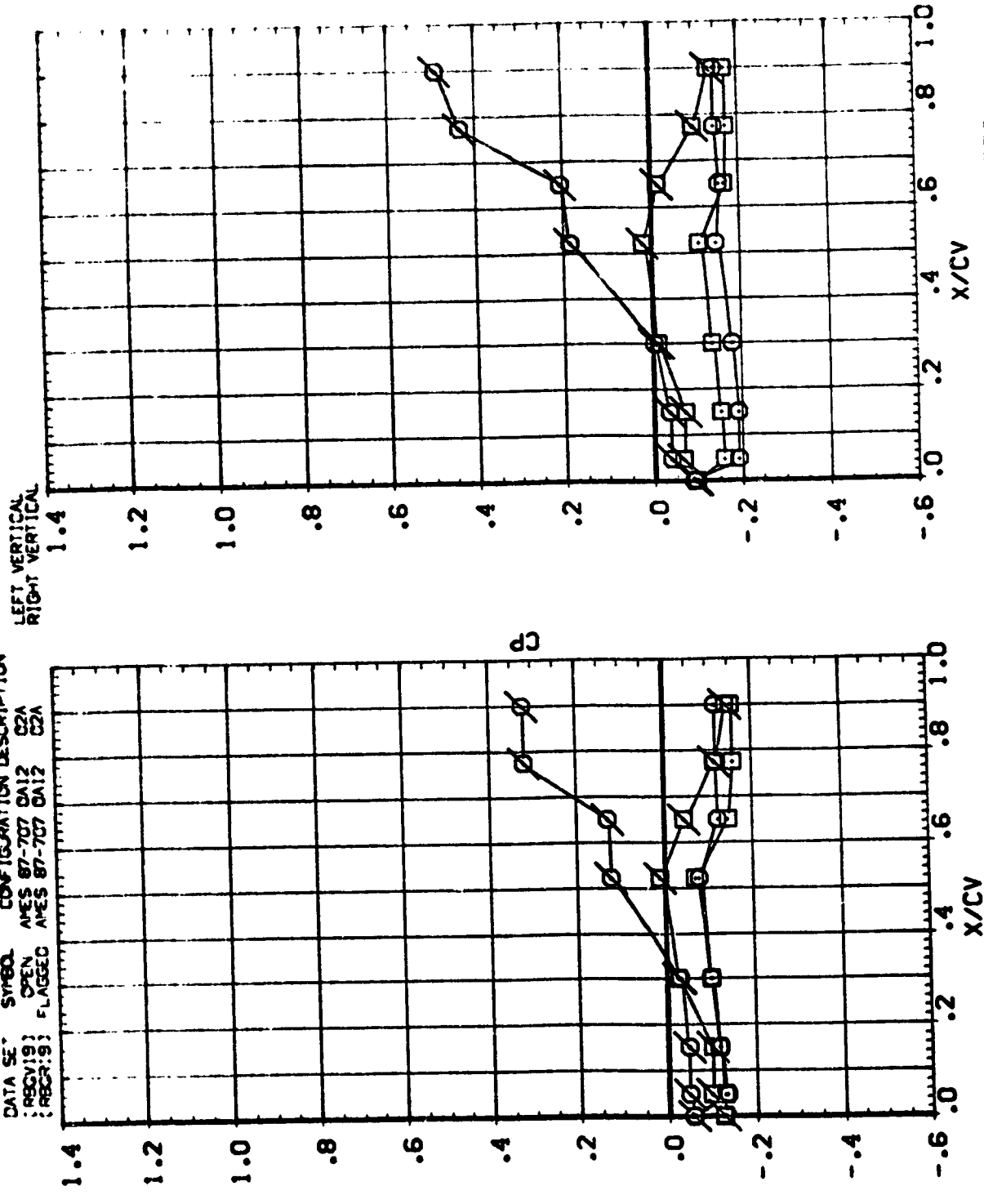
SYMBOL 1/BV BETA WACH
 .158 -6.470 2.498
 .316 -3.300
 .600



PARAMETRIC VALUES
 30.000 9.000 20.000
 .000 9.000 40.000
 ALPHA
 ELEVON

SYMBOL Z/BV BE'A MACH
 .84C 2.498
 .925 -3.300

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 :RBCV19: OPEN ARES 87-707 DA12 C2A
 :RBCV19: FLAGGED ARES 87-707 DA12 C2A



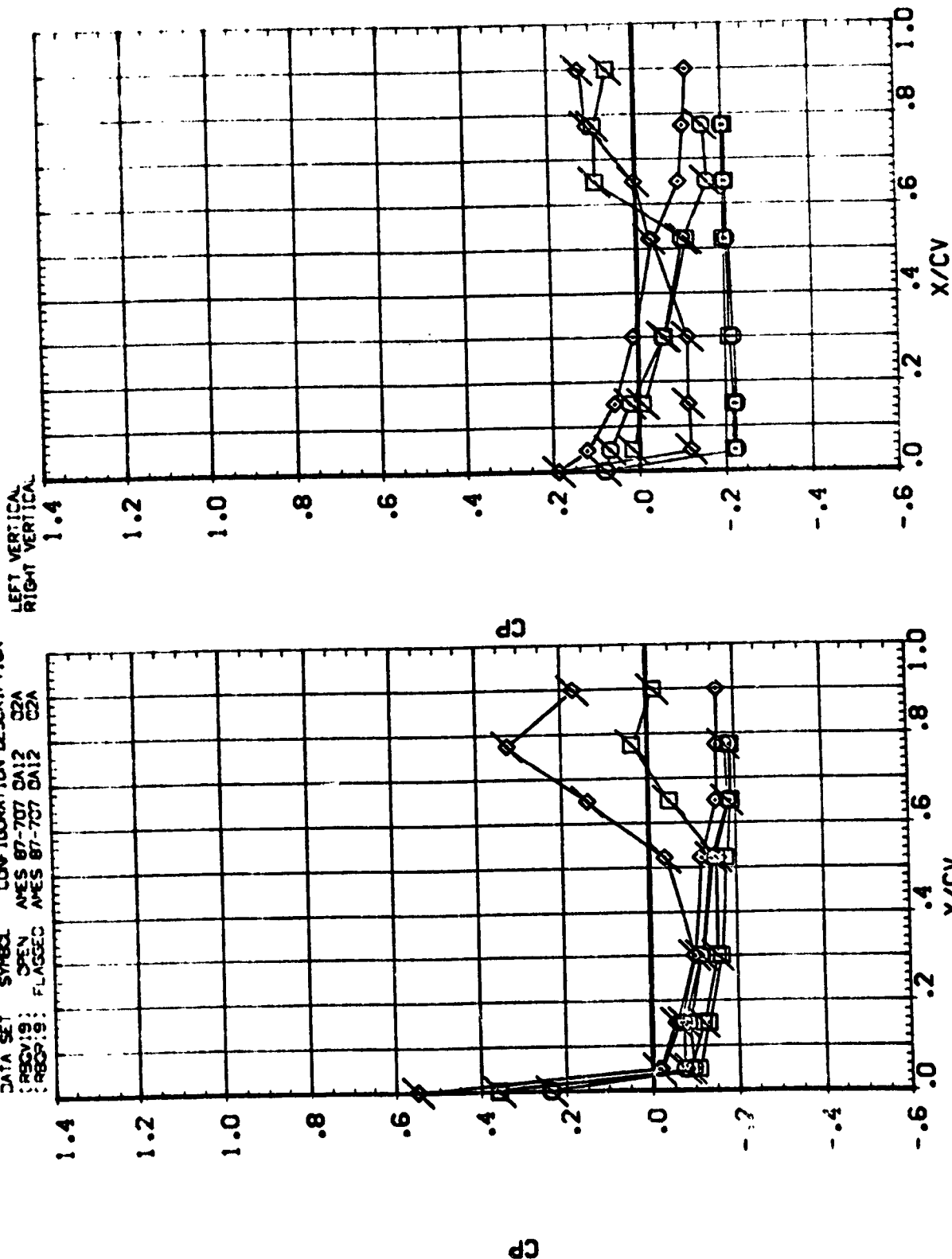
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

SYMBOL: Z/B: .158
 .316
 .600

BE/A: .14C 2.498
 3.06C

PARAMETRIC VALUES
 ALPHA: 30.000
 ELEVON: .000
 RUDDER: 20.000
 RUDDER: 40.000

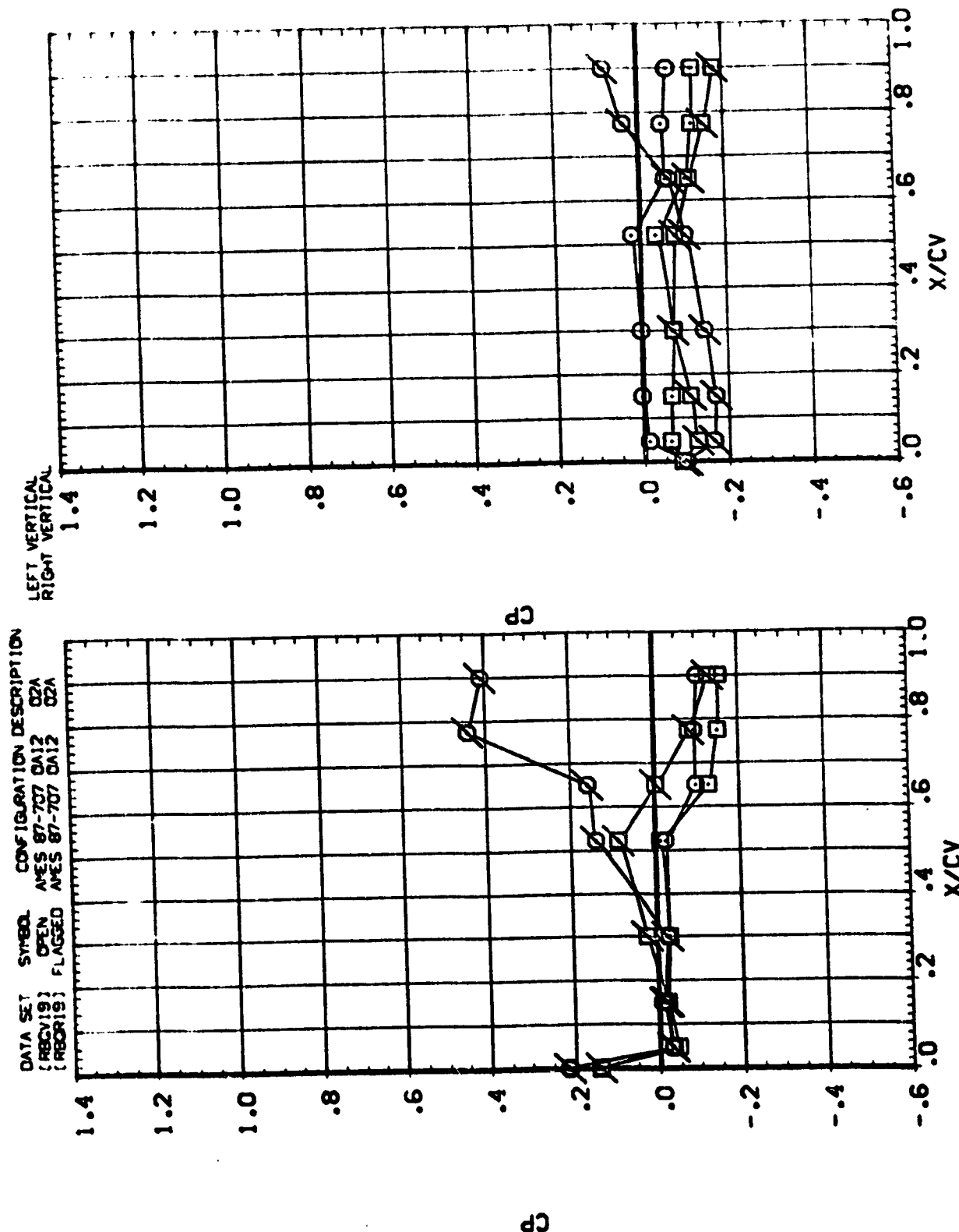
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 : RECV: 19: OPEN AYES 87-707 DA12 02A
 : RECV: 19: FLAGGED AYES 87-707 DA12 02A



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 ALPHA 30.000 R_000P 20.000
 ELEVON .000 R_000P 40.000

SYMBOL Z/BV BETA WAC
 .840 .140 2.498
 .975 3.060

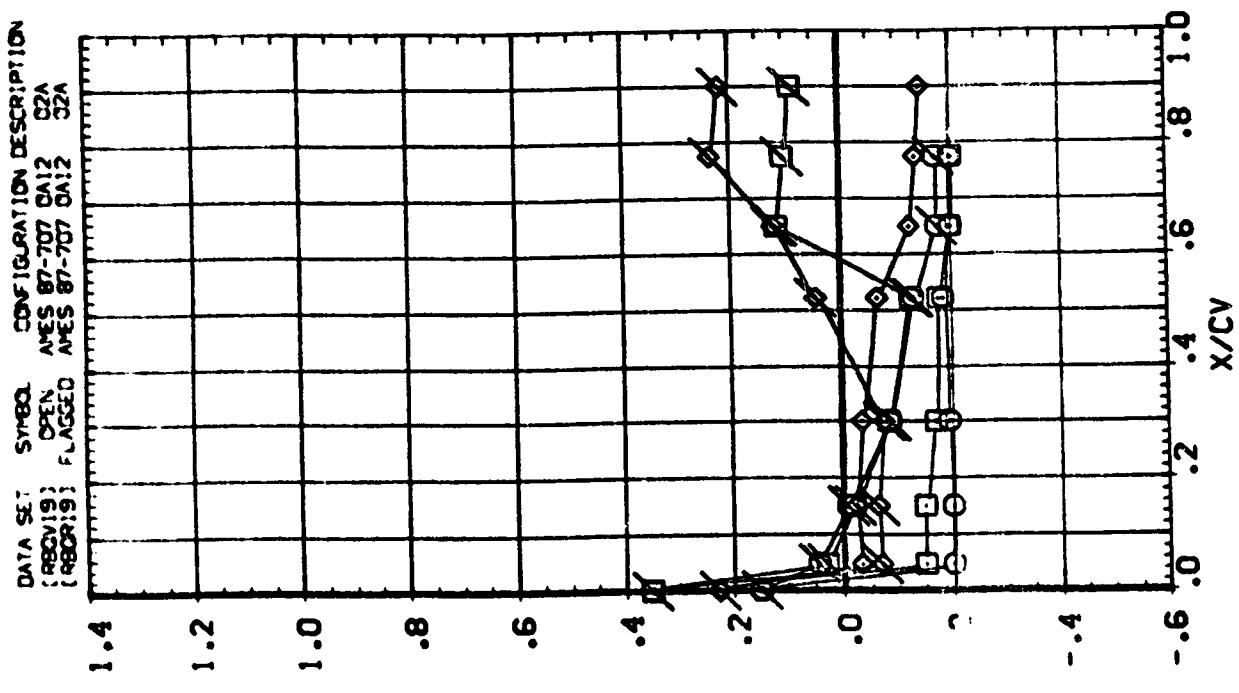


PARAMETRIC VALUES
 30.000 RUDER -70.000
 .000 RUDFLR 40.000

ALPHA
 ELEVON

SYMBOL Z/B₁ BETA MACH
 O .158 6.250 2.498
 O .316
 O .600

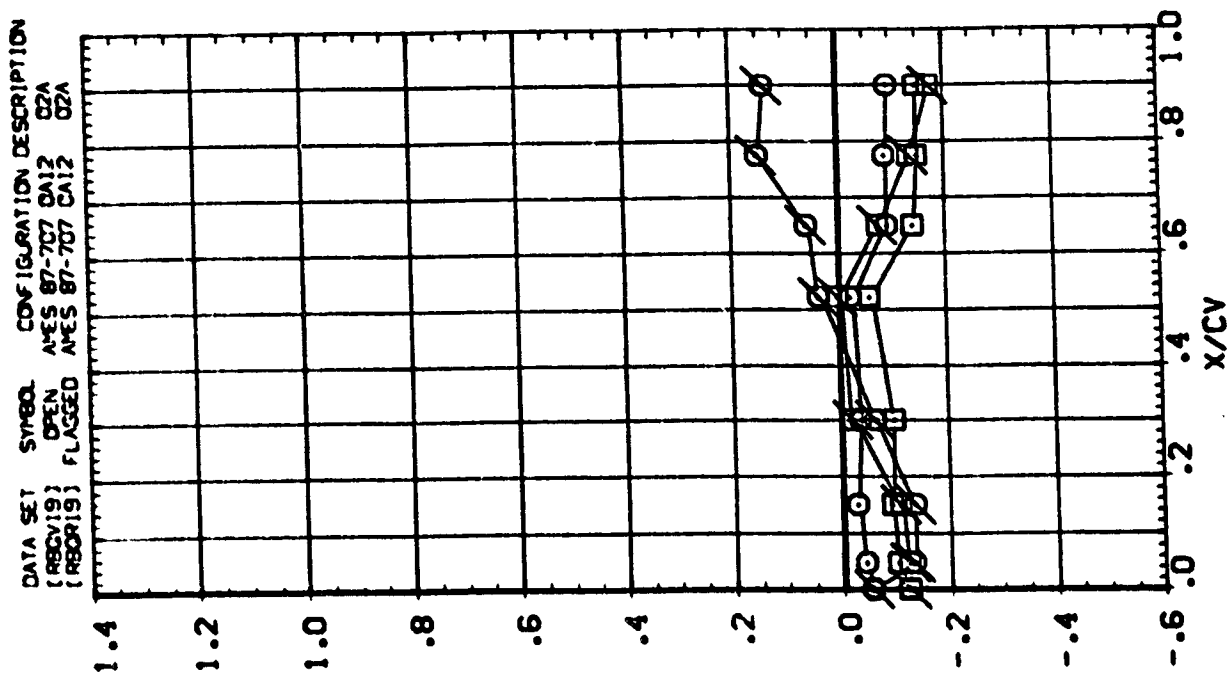
LEFT VERTICAL
 RIGHT VERTICAL



PARAMETRIC VALUES
 ALPHA 30.000 RJOOR -20.000
 ELEVON .000 RJOOR 40.000

SYMBOL 2/BV BETA MACH
 .04C 6.750 2.498
 .975

LEFT VERTICAL
 RIGHT VERTICAL



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES

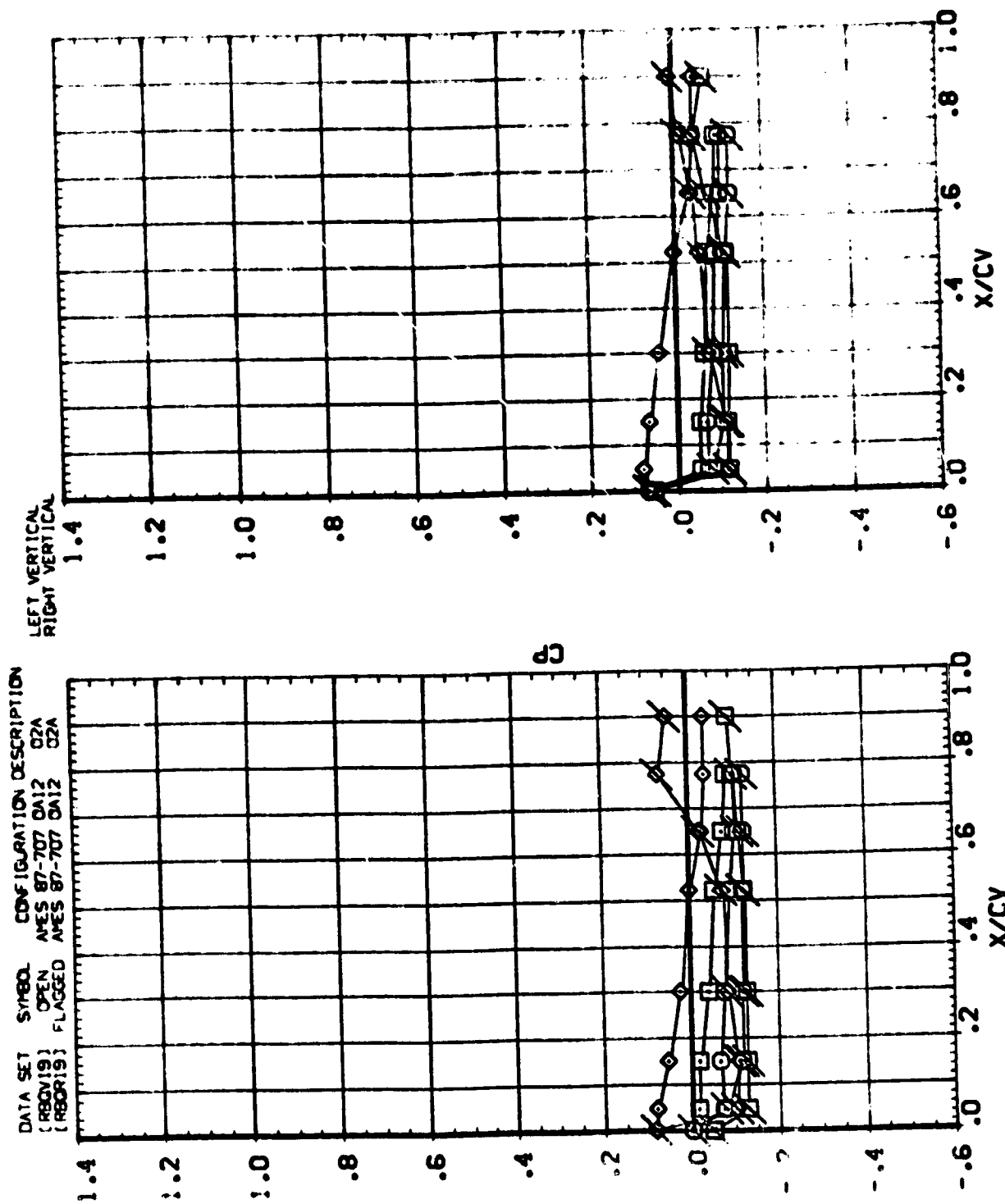
ALPHA	30.000	RUDER	-25.000
ELEVON	.000	RJFLR	40.000

DATA SET SYMBOL Z/BV BETA MACH

(R0019)	OPEN	-6.700	3.502
(R0019)	FLAGGED	-3.470	

SYMBOL

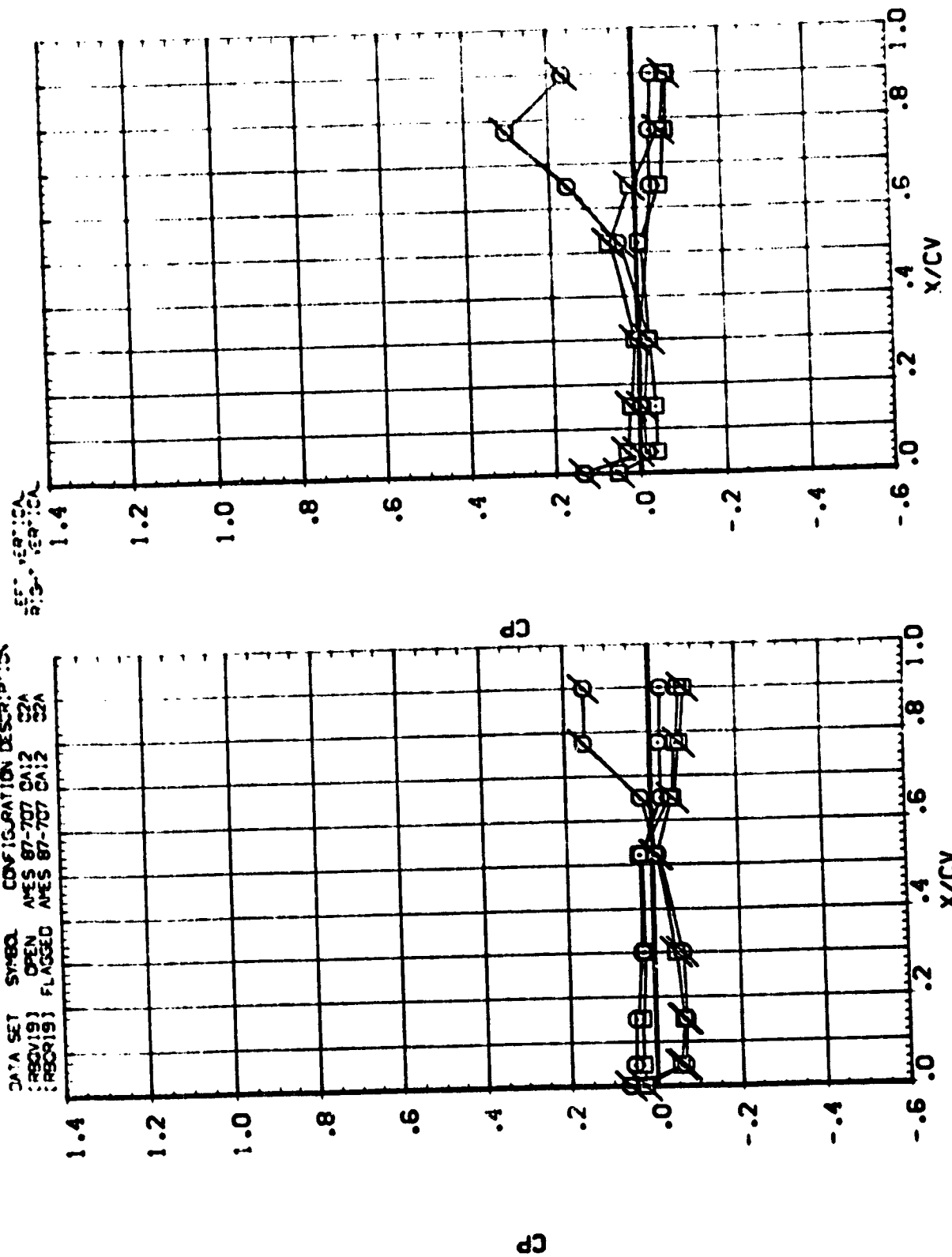
□	.150
○	.315
◇	.600



PARAMETER VALUES
 ALPHA 20.000 20.000 20.000
 ELEVON .000 .000 .000

SYMBOL Z/B/ BETA MACH
 .840 -6.700 3.502
 .925 -3.420

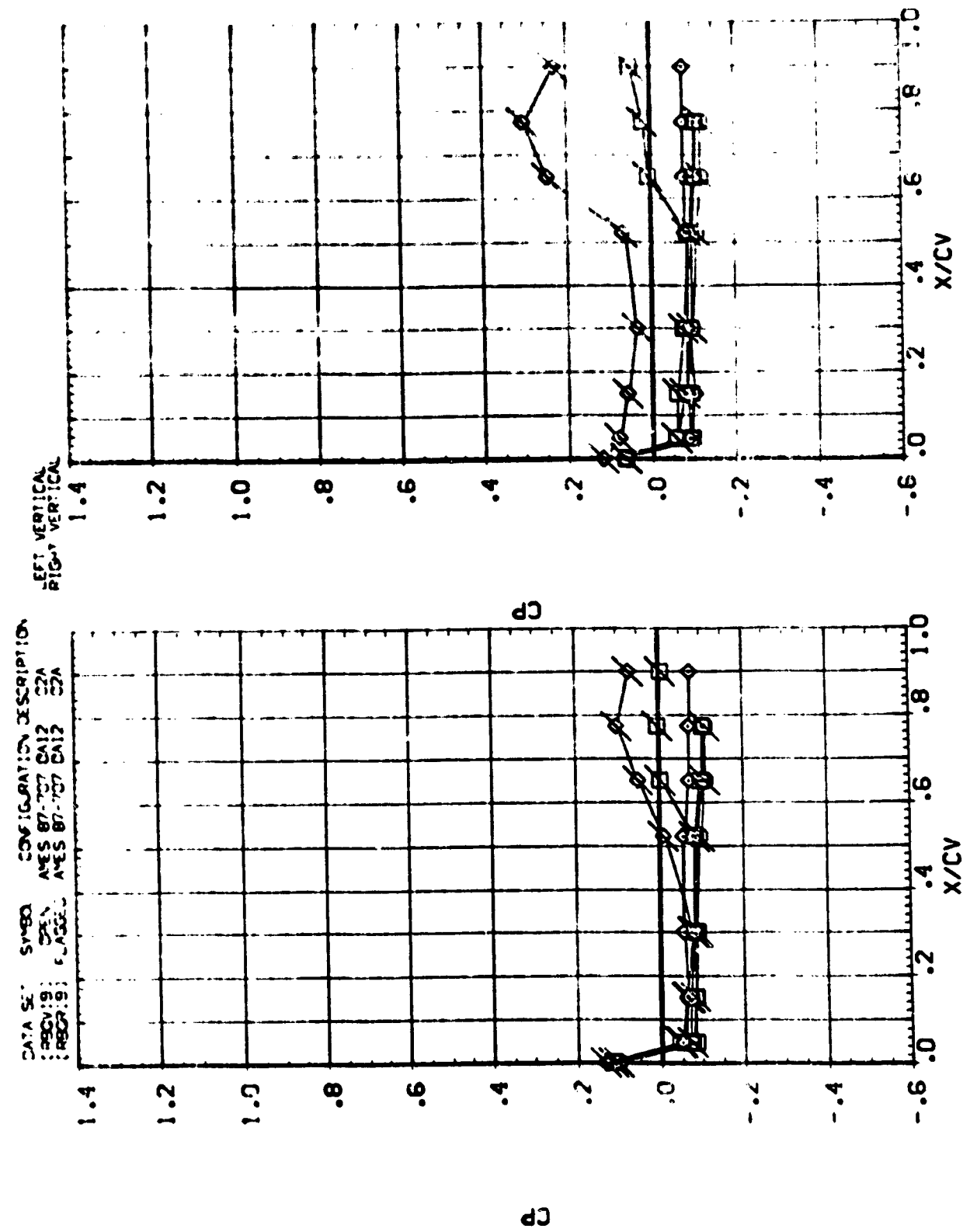
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 :RSCV18 OPEN AMES 87-707 CA12 C2A
 :RSCV19 FLAGGED AMES 87-707 CA12 C2A



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETER VALUES
 ALPHA 20.000
 ELEVON 20.000

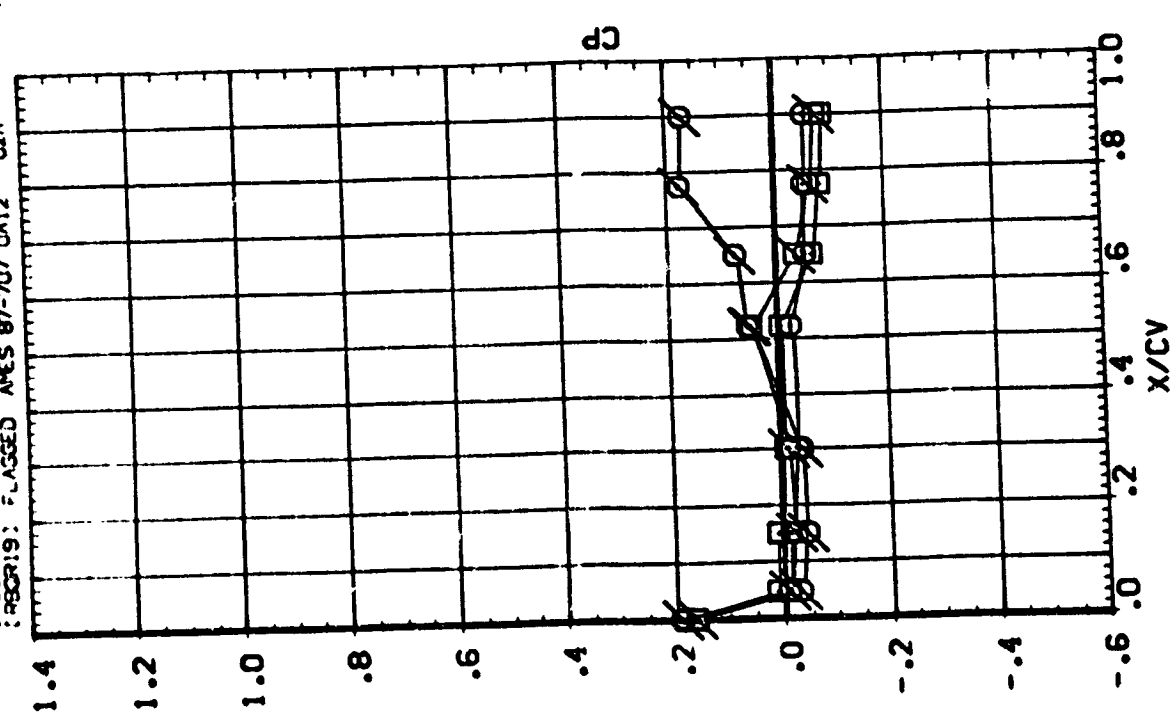
SYMBOL 2/3/4 BETA 3.502
 0.158
 0.316
 0.600



SYMBOL Z/B/ BE/A MACH
 .84C .975 .130 3.502
 .975 3.170

PARAMETRIC VALUES
 ALPHA 30.000
 ELEVON .000
 RUDDER 20.000
 ROLLER 40.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RBCV19) OPEN ARES 87-707 CA12 C2A
 (RBCV19) FLAGGED ARES 87-707 CA12 C2A



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

III

SYMBOL Z/BV
 .158
 .316
 .600

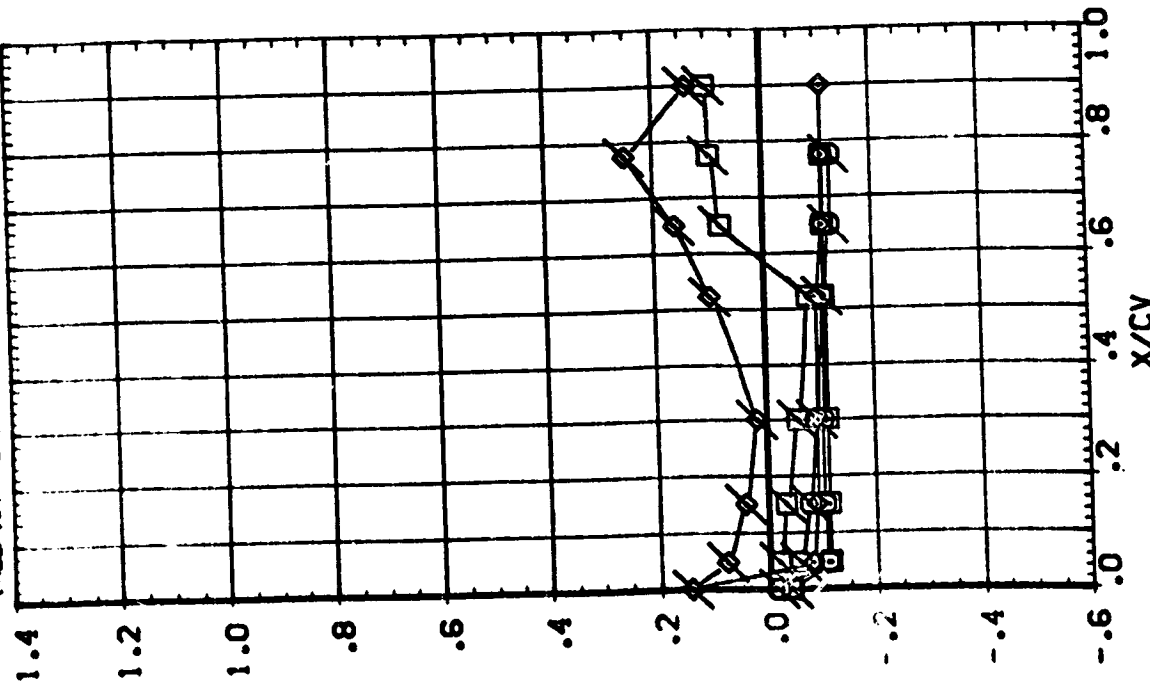
BETA 6.470
 WACH 3.502

PARAMETRIC VALUES
 30.000 RLODER
 .000 RLOLR

ALPHA
 ELEVON

LEFT VERTICAL
 RIGHT VERTICAL

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RBCV19) OPEN ANES 87-707 DA12 C2A
 (RBCV19) FLAGGED ANES 87-707 DA12 C2A



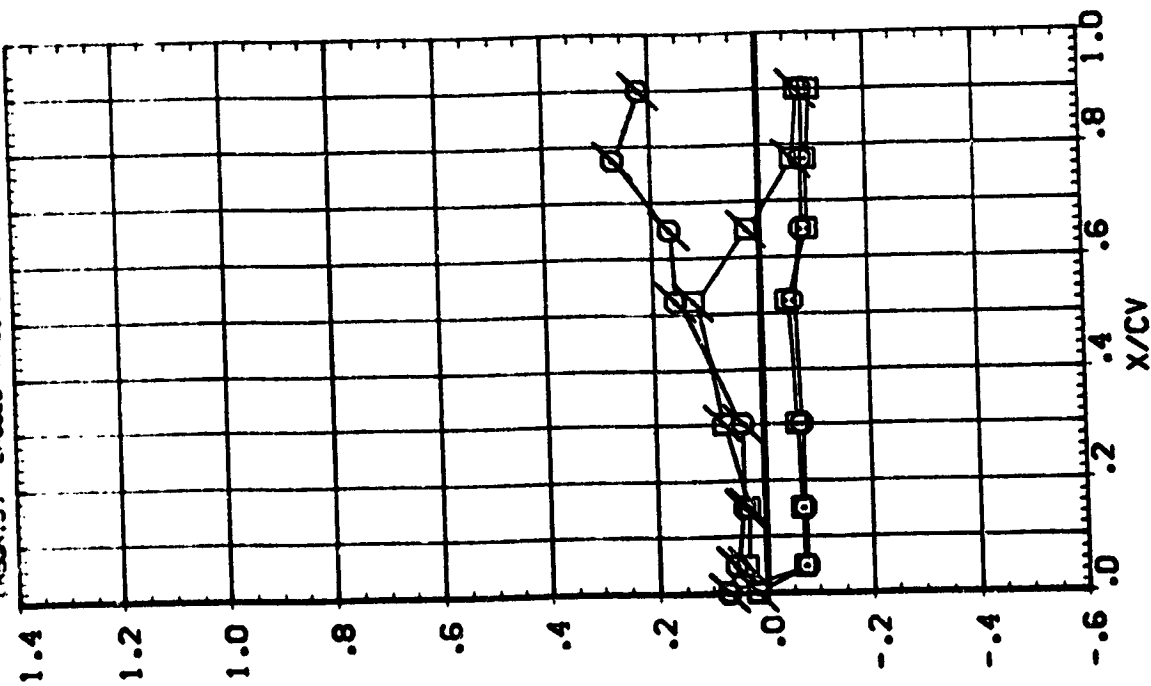
CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

PARAMETRIC VALUES
 ALPHA 30.000 RUDER 45.000
 ELEVON .000 RUD. 2

SYMBOL Z/BV SE/A MACH
 .84C 6.47C 3.502
 .925

LEFT VERTICAL
 RIGHT VERTICAL

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RBDV:9) OPEN AMES 87-707 OA12 ODA
 (RBDV:9) FLASSED AMES 87-707 OA12 ODA



CHORDWISE DISTRIBUTION OF LEFT AND RIGHT SURFACE VERTICAL TAIL PRESSURES

(RBGCO1)

ORBITER BASE

02A

AVES 87-707 CA:2

SYMBOL

TAP NO

A

.000

MACH

2.498

PARAMETRIC VALUES

.000

RUDDER

.000

BETA

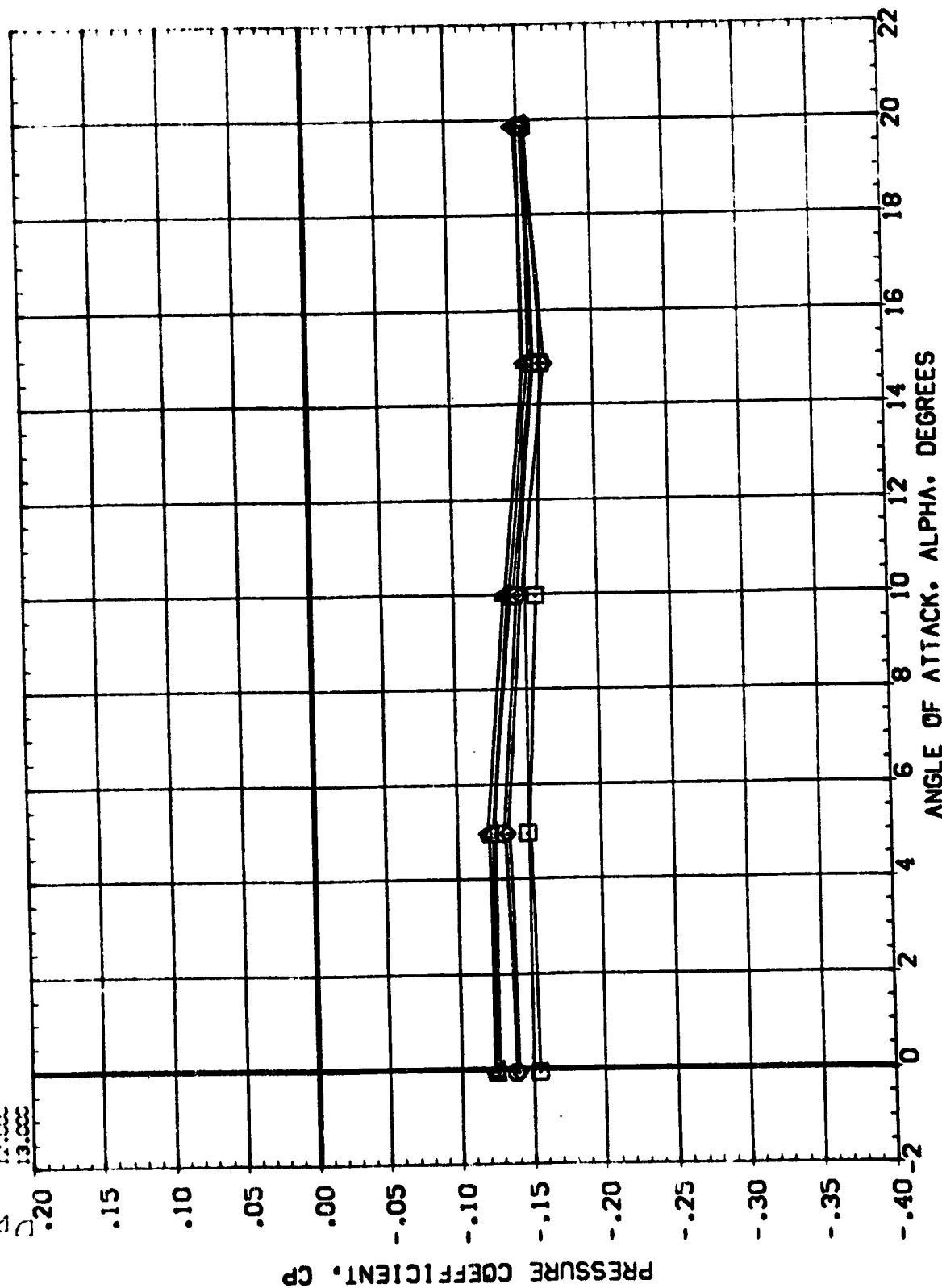
ELEVON

.000

RUDFLR

40.000

7.000
8.000
9.000
10.000
11.000
12.000
13.000

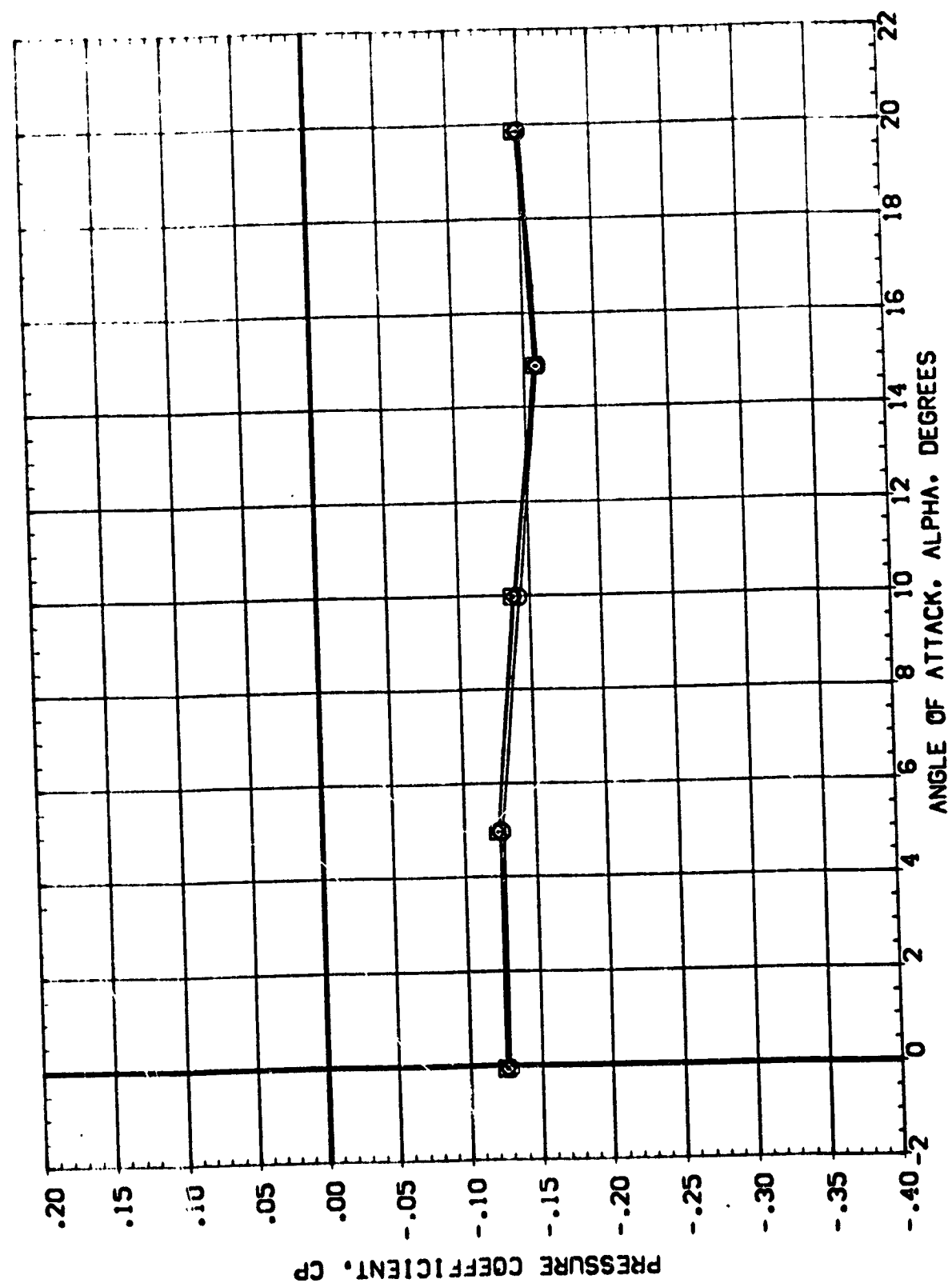


ORBITER BASE PRESSURES

AMES 87-100 JAN 1 1968

SYMBOL TAP NO A MACH
14.000 .000 2.490
15.000
16.000

PARAMETRIC VALUES
BETA .000 .000 .000
ELEVON .000 .000 .000



ORBITER BASE PRESSURES

(R83C01)

ORBITER BASE

Q2A

AVES 87-707 CA:2

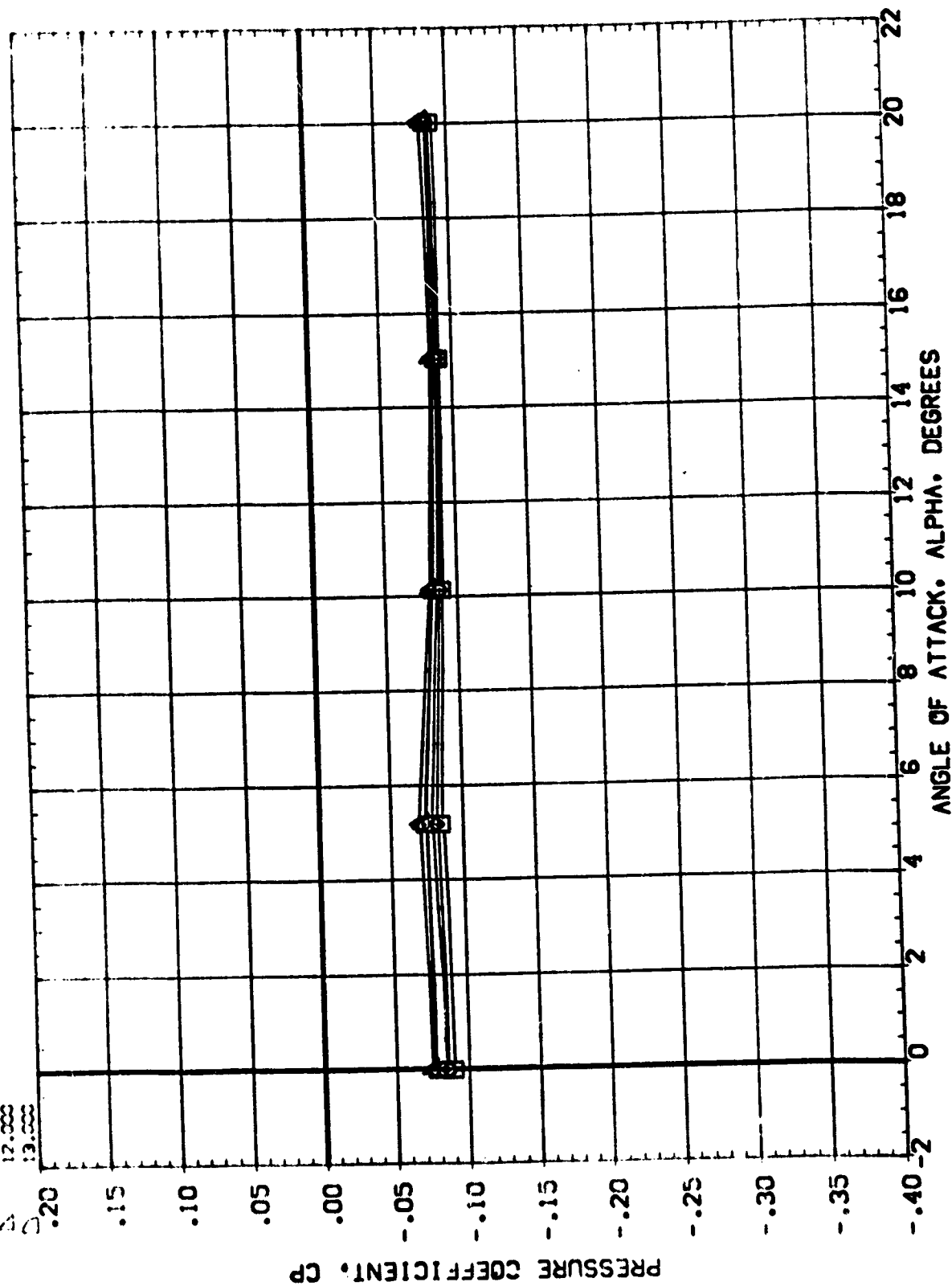
PARAMETRIC VALUES
BETA .000 RUDER .000
ELEVON .000 ROLF 40.000

TAP NO 7.000
8.000
9.000
11.000
12.000
13.000

WAC- 3.502

SYMBOL

0 1 2 3 4 5 6 7 8 9 10 11 12 13



ORBITER BASE PRESSURES

[RB0000:]

ORBITER BASE

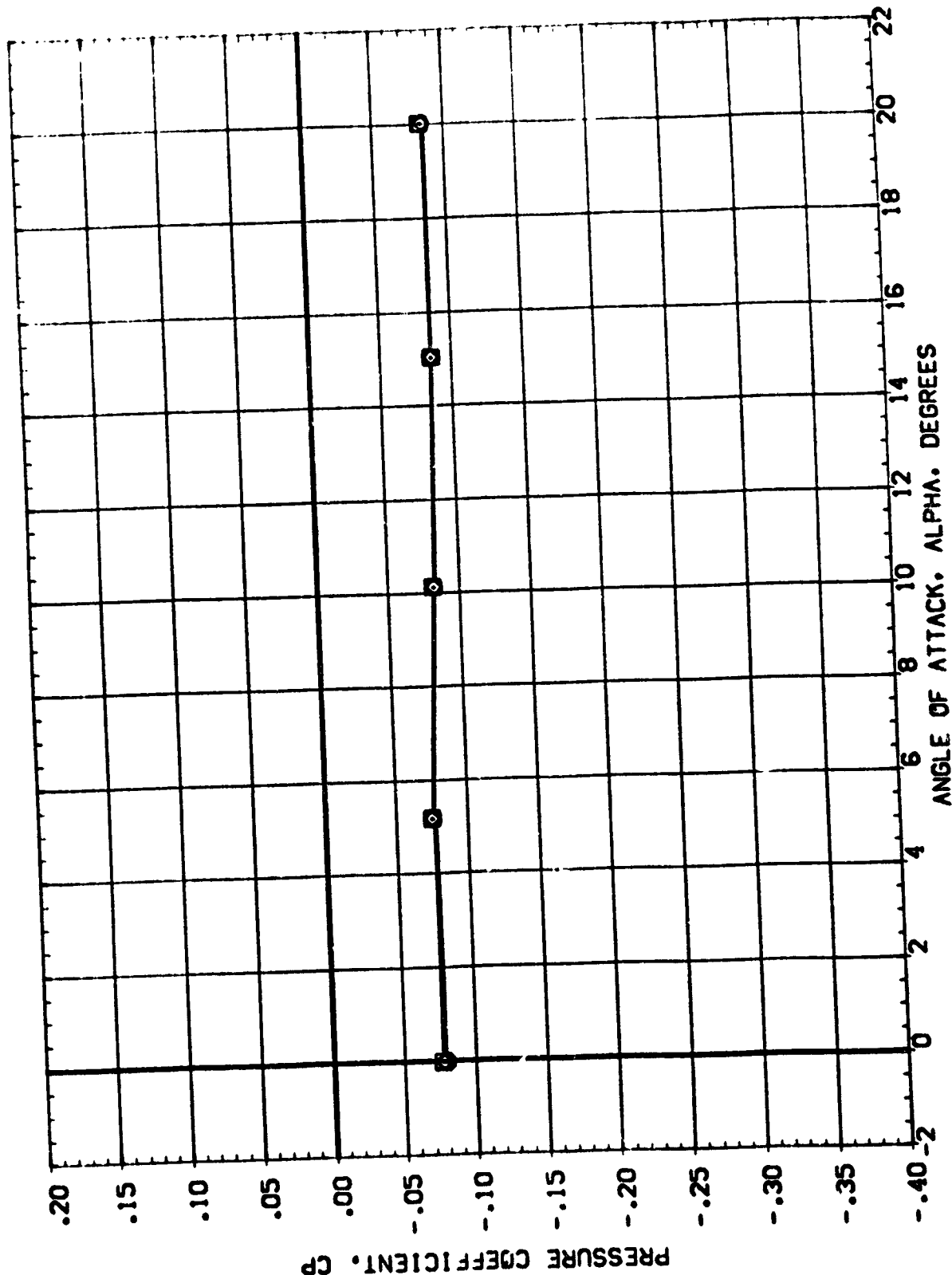
02A

AMES 87-707 3A12

SYMBOL
14.000
15.000
16.000

TAP NO
A
MACH
.000
3.502

PARAMETRIC VALUES
BETA
ELEVON
.000
.000
RUDER
RUDER
40.000
40.000



ORBITER BASE PRESSURES

AMES 87-707 3A12 02A ORBITER BASE (RB00005)

PARAMETRIC VALUES
 ALPHA .000
 ELEVON .000
 RUDDER .000
 RUDDER 40.000

TAP NO 7.000
 8.000
 9.000
 11.000
 12.000
 13.000

SYMBOL

7.000

8.000

9.000

11.000

12.000

13.000

14.000

15.000

16.000

17.000

18.000

19.000

20.000

21.000

22.000

23.000

24.000

25.000

26.000

27.000

28.000

29.000

30.000

31.000

32.000

33.000

34.000

35.000

36.000

37.000

38.000

39.000

40.000

41.000

42.000

43.000

44.000

45.000

46.000

47.000

48.000

49.000

50.000

51.000

52.000

53.000

54.000

55.000

56.000

57.000

58.000

59.000

60.000

61.000

62.000

63.000

64.000

65.000

66.000

67.000

68.000

69.000

70.000

71.000

72.000

73.000

74.000

75.000

76.000

77.000

78.000

79.000

80.000

81.000

82.000

83.000

84.000

85.000

86.000

87.000

88.000

89.000

90.000

91.000

92.000

93.000

94.000

95.000

96.000

97.000

98.000

99.000

100.000

101.000

102.000

103.000

104.000

105.000

106.000

107.000

108.000

109.000

110.000

111.000

112.000

113.000

114.000

115.000

116.000

117.000

118.000

119.000

120.000

121.000

122.000

123.000

124.000

125.000

126.000

127.000

128.000

129.000

130.000

131.000

132.000

133.000

134.000

135.000

136.000

137.000

138.000

139.000

140.000

141.000

142.000

143.000

144.000

145.000

146.000

147.000

148.000

149.000

150.000

151.000

152.000

153.000

154.000

155.000

156.000

157.000

158.000

159.000

160.000

161.000

162.000

163.000

164.000

165.000

166.000

167.000

168.000

169.000

170.000

171.000

172.000

173.000

174.000

175.000

176.000

177.000

178.000

179.000

180.000

181.000

182.000

183.000

184.000

185.000

186.000

187.000

188.000

189.000

190.000

191.000

192.000

193.000

194.000

195.000

196.000

197.000

198.000

199.000

200.000

201.000

202.000

203.000

204.000

205.000

206.000

207.000

208.000

209.000

210.000

211.000

212.000

213.000

214.000

215.000

216.000

217.000

218.000

219.000

220.000

221.000

222.000

223.000

224.000

225.000

226.000

227.000

228.000

229.000

230.000

231.000

232.000

233.000

234.000

235.000

236.000

237.000

238.000

239.000

240.000

241.000

242.000

243.000

244.000

245.000

246.000

247.000

248.000

249.000

250.000

251.000

252.000

253.000

254.000

255.000

256.000

257.000

258.000

259.000

260.000

261.000

262.000

263.000

264.000

265.000

266.000

267.000

268.000

269.000

270.000

271.000

272.000

273.000

274.000

275.000

276.000

277.000

278.000

279.000

280.000

281.000

282.000

283.000

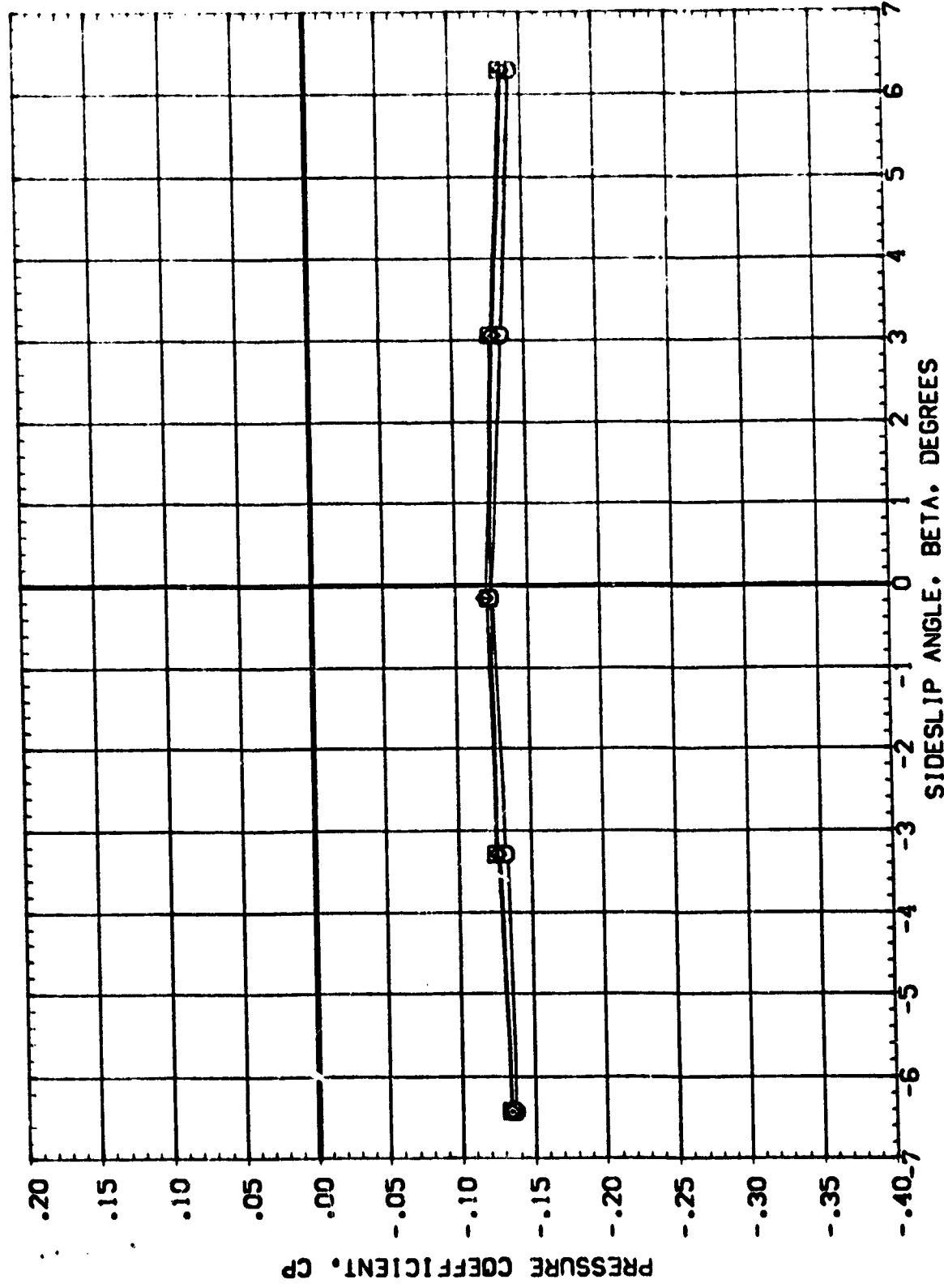
284.000

(RBQC05)

ORBITER BASE

AMES 87-707 0A12 02A

SYMBOL	TAP NO	A	MACH	PARAMETRIC VALUES
○	14.000	.000	2.498	ALPHA
□	15.000			ELEVON
◇	16.000			
				.000 RUDER
				.000 RUDER
				70.000
				40.000



ORBITER BASE PRESSURES

AMES 87-707 0A12 02A (RBQC05)

ORBITER BASE

PARAMETRIC VALUES

ALPHA
ELEVON

.000
.000

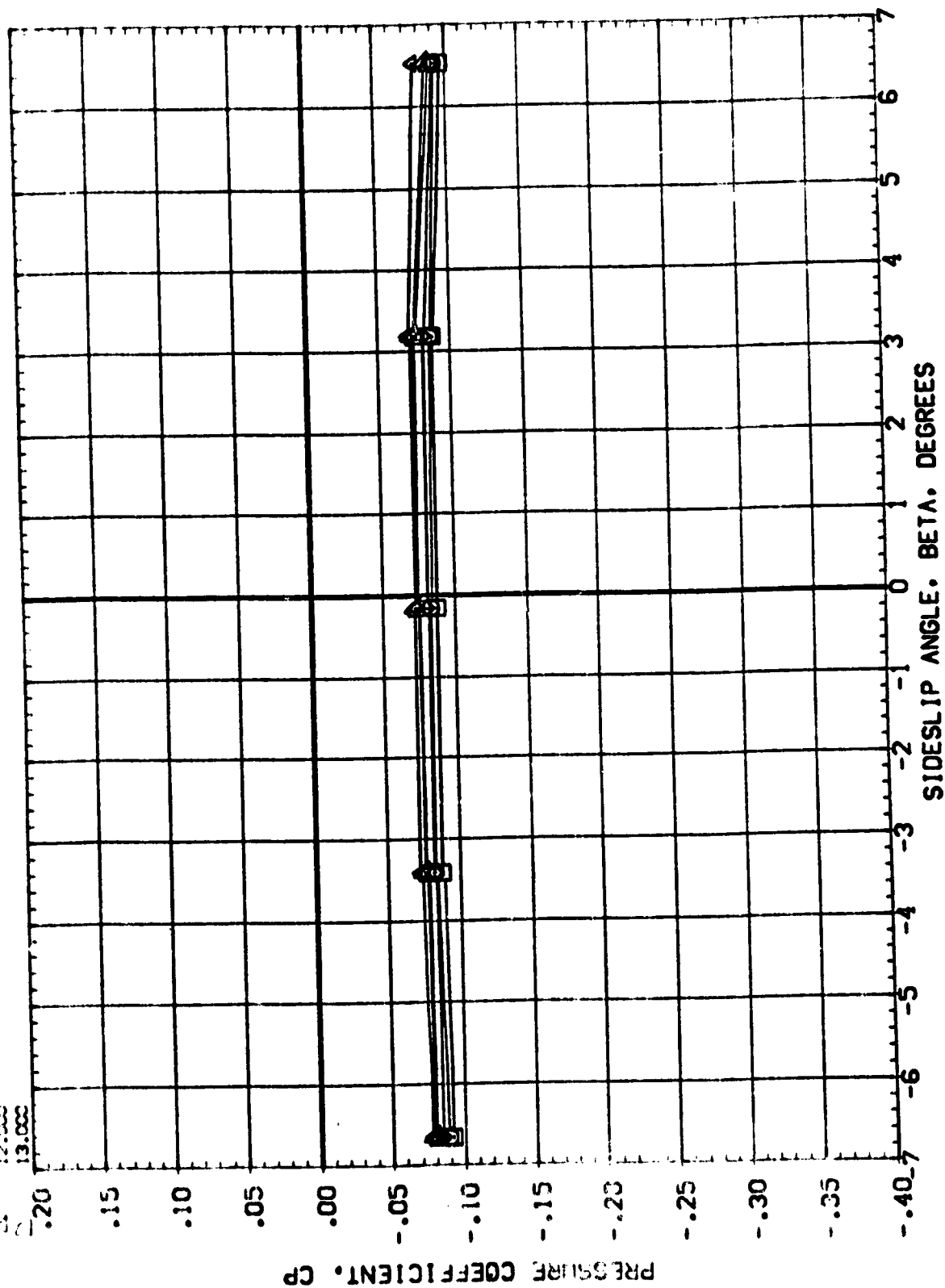
RJODER
RJOFER

-20.000
40.000

SYNCH. TAP NO. A MACH

7.000
8.500
9.500
11.000
12.000
13.000

3.501



ORBITER BASE PRESSURES

(R88205)

ORBITER BASE

02A

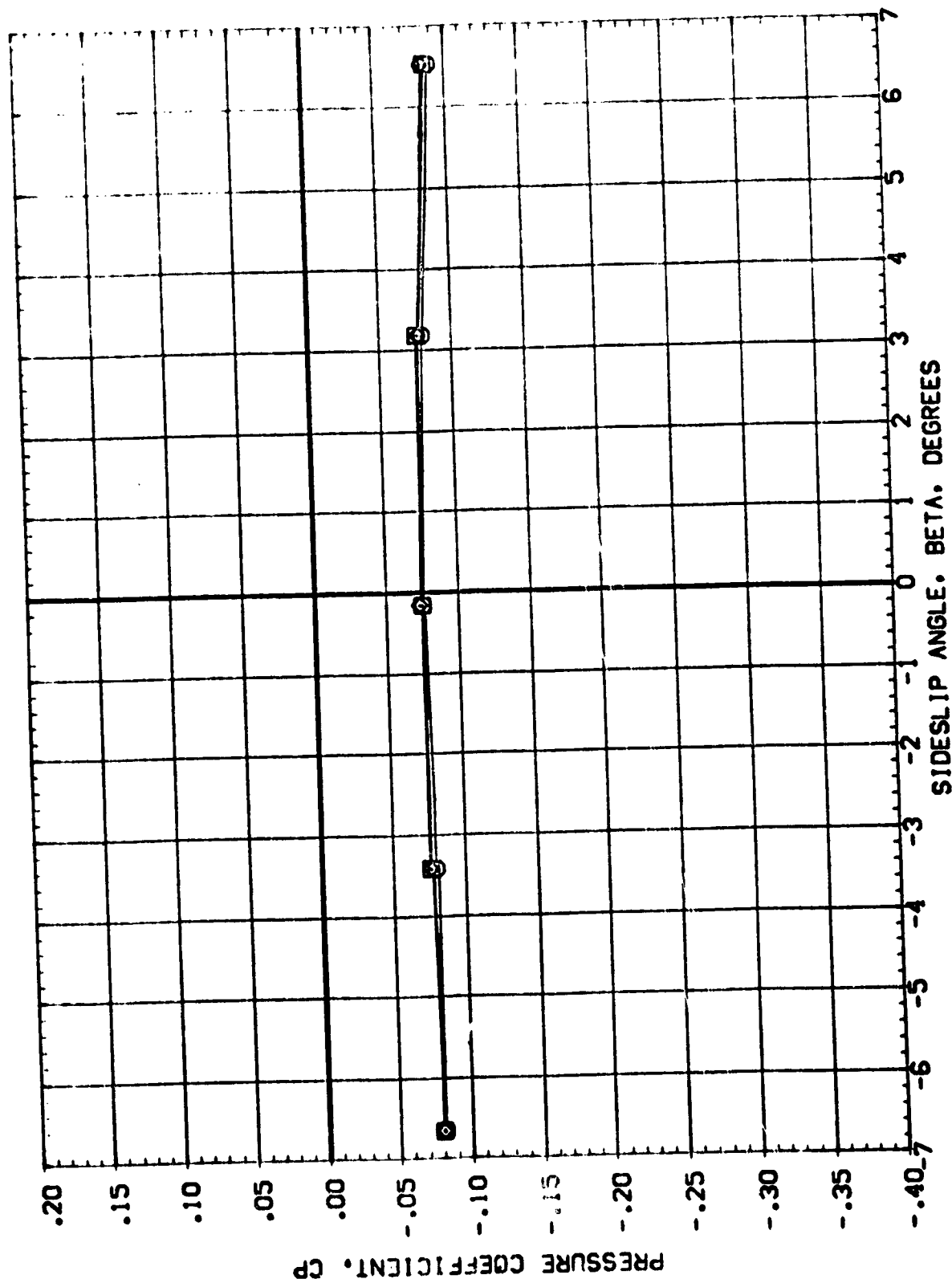
AVES 87-707 CA12

SYNCH. ☐ ☒

TAP NO. A WACH
:4.000 :.000 3.50:
:5.000
:6.000

PARAMETRIC VALUES

ALPHA ELEVON
.000 .000
R.000P 2.000R
10.000 10.000



ORBITER BASE PRESSURES

III

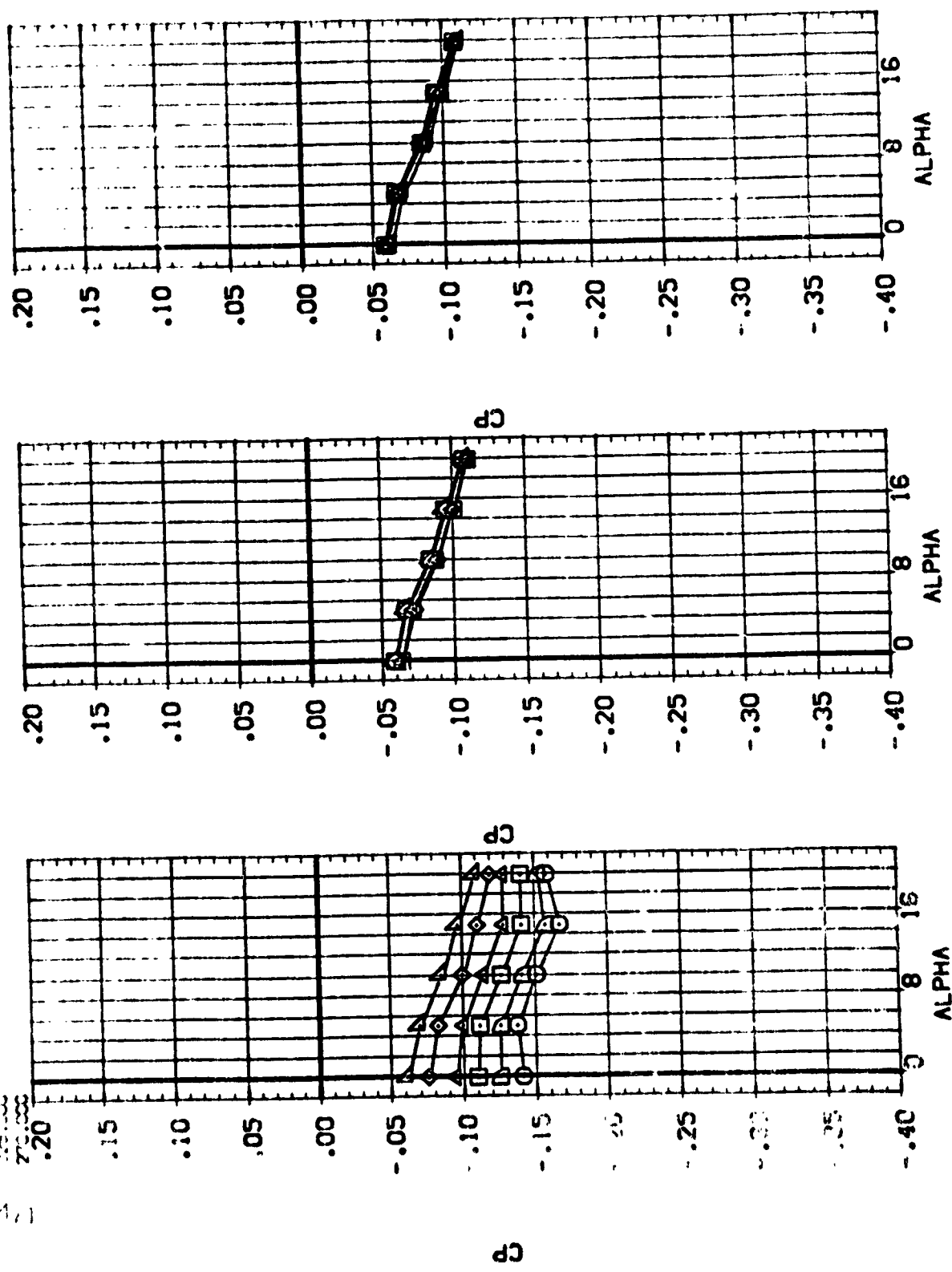
24

AVES 87-707 3A12 02A UPPER MPS NOZZLE (R8000:)

PARAMETRIC VALUES
 BETA .000 RLOOR .000
 ELEVON .000 RLOOR 40.000

SYMBOL
 .000
 90.000
 135.000
 180.000
 225.000
 270.000

00104471



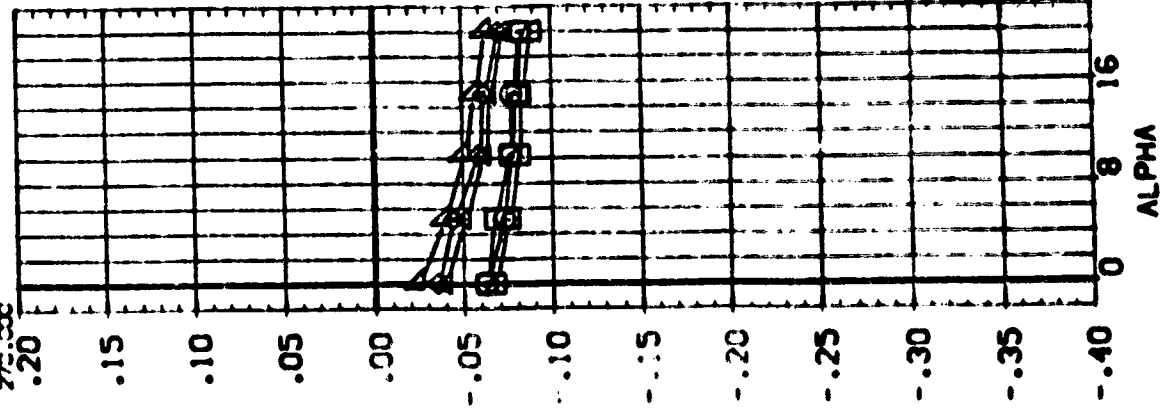
UPPER MPS NOZZLE PRESSURES

11-10-60 10:00 AM

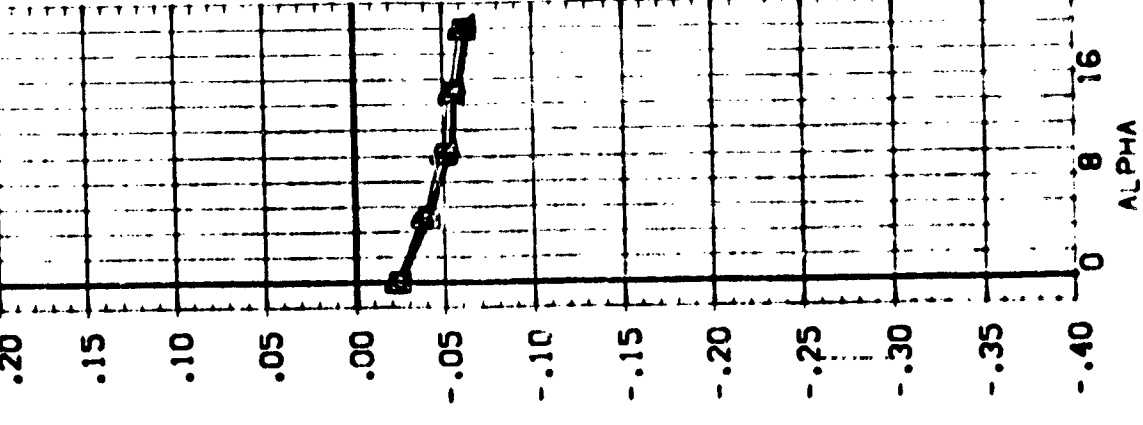
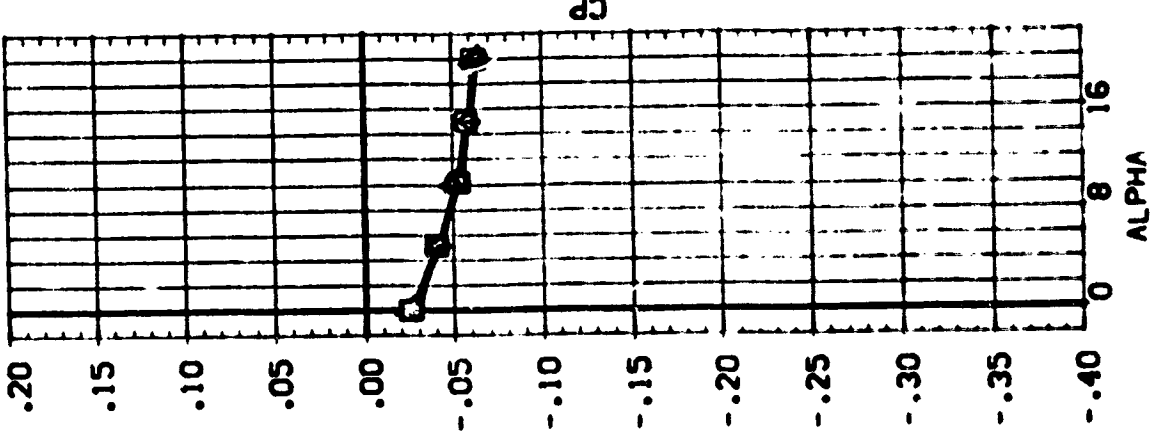
SYMBOL:
 1.000
 90.000
 1.35.000
 1.80.000
 275.000
 275.000

ALPHA:
 .000
 .750
 .500
 .750

MACH:
 3.502



UPPER MPS NOZZLE PRESSURES



PARAMETRIC VALUES
 BETA:
 .000
 .000
 .000
 .000
 .000
 .000

ELEVATION:
 .000
 .000
 .000
 .000
 .000
 .000

III

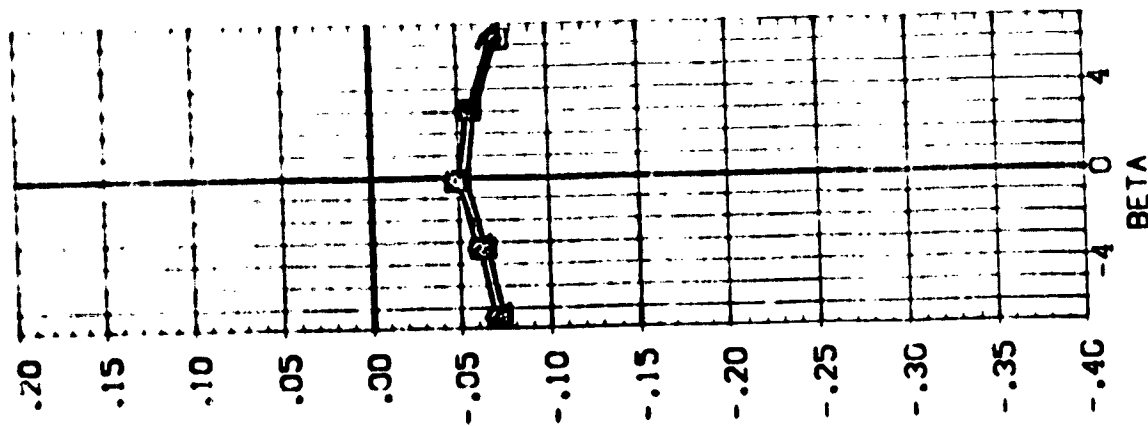
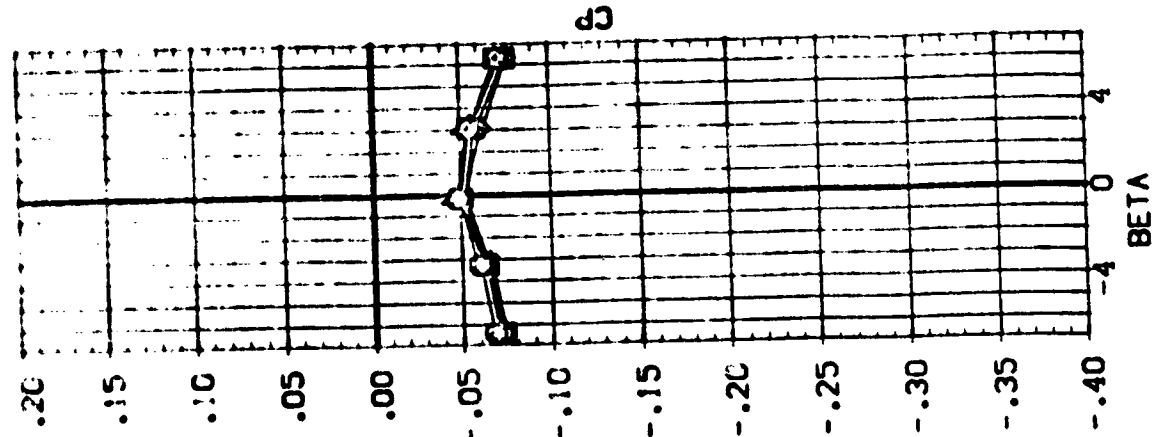
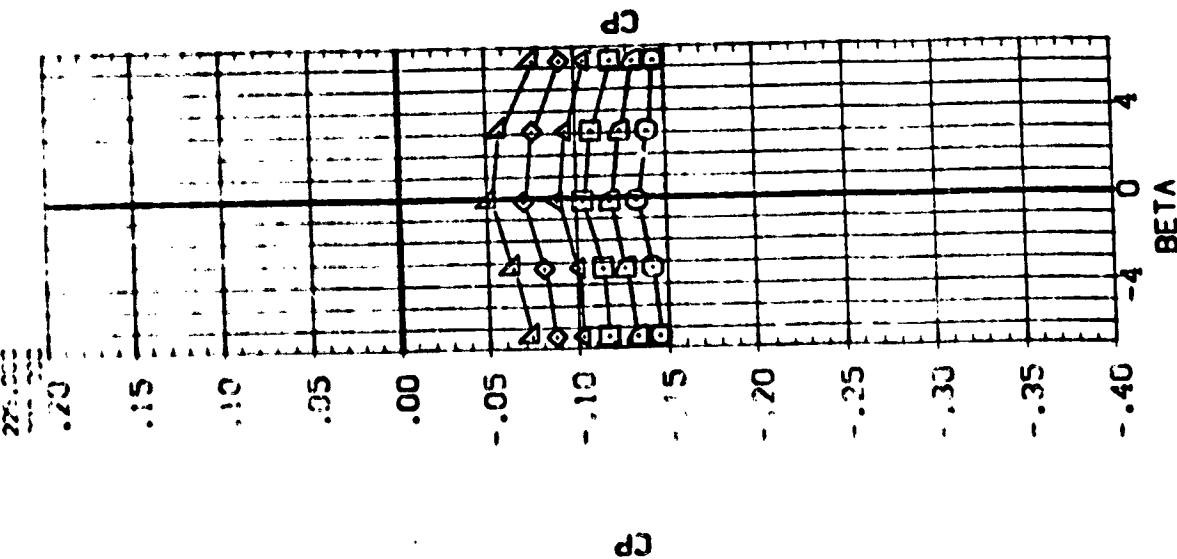
AN-87 1000 GA:2 22A

UPPER MPS NOZZLE

(R80005)

PISTON RING VALVES
 .300 2.000 2.000
 .100 0.0 0.0

AN-87 1000 GA:2 22A
 .300 2.000 2.000
 .100 0.0 0.0



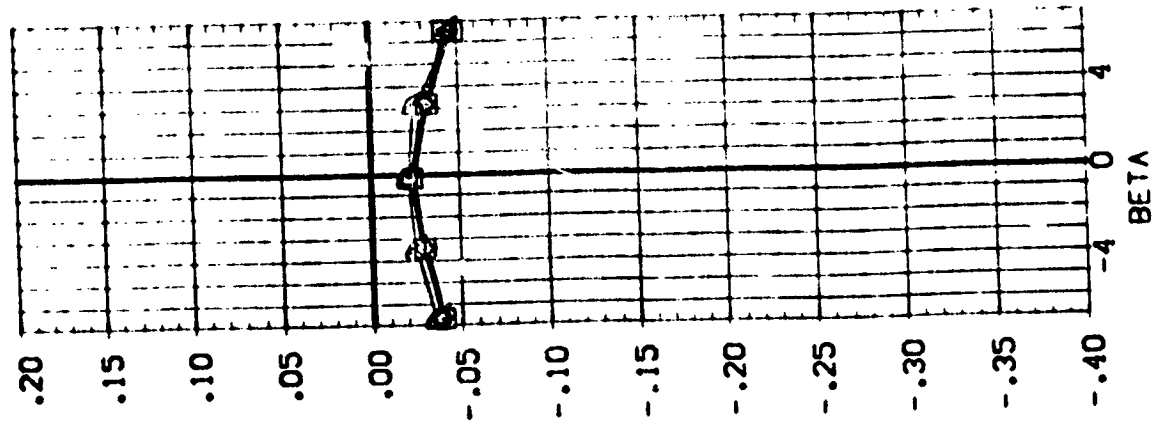
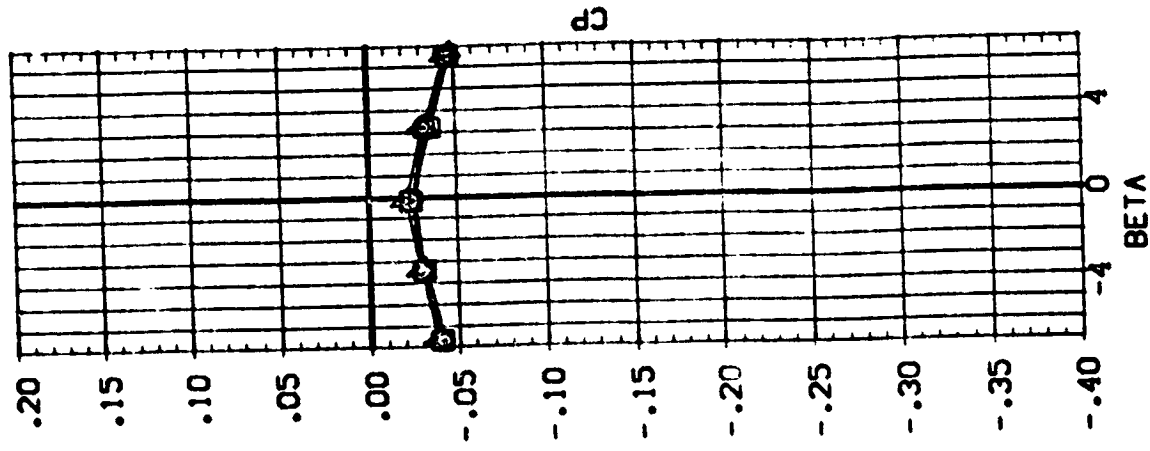
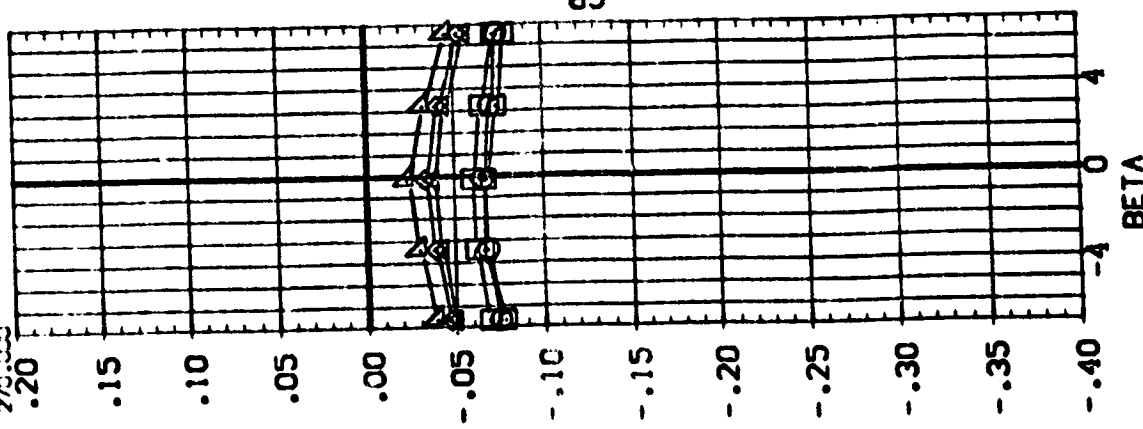
UNIT 12-10-67

SYMBOL
 0
 1
 2
 3
 4
 5
 6
 7
 8
 9
 10
 11
 12
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22
 23
 24
 25
 26
 27
 28
 29
 30
 31
 32
 33
 34
 35
 36
 37
 38
 39
 40
 41
 42
 43
 44
 45
 46
 47
 48
 49
 50
 51
 52
 53
 54
 55
 56
 57
 58
 59
 60
 61
 62
 63
 64
 65
 66
 67
 68
 69
 70
 71
 72
 73
 74
 75
 76
 77
 78
 79
 80
 81
 82
 83
 84
 85
 86
 87
 88
 89
 90
 91
 92
 93
 94
 95
 96
 97
 98
 99
 100

PM: .000
 90.000
 135.000
 180.000
 225.000
 270.000

K/LP .250
 .500
 .750

MACH 3.501



PARAMETRIC VALUES
 .000 RUDER
 .000 ROLL P
 20.000
 40.000

ALPHA
 ELEVON

UPPER MPS NOZZLE PRESSURES

(RBQED01)

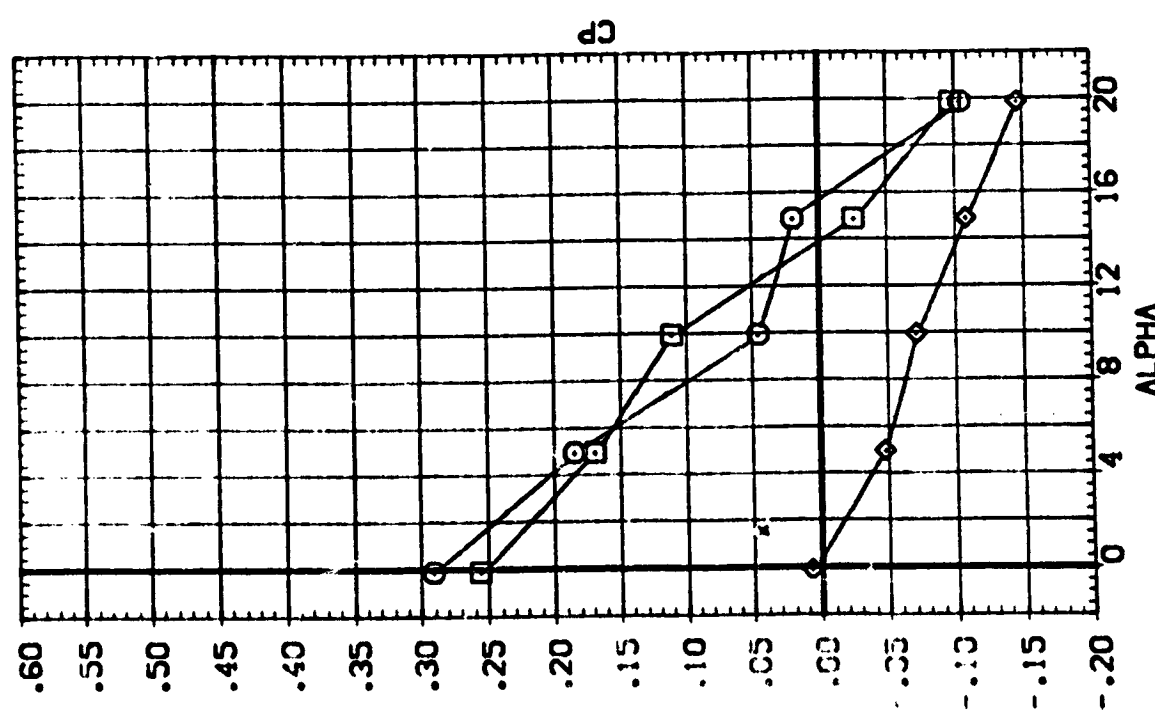
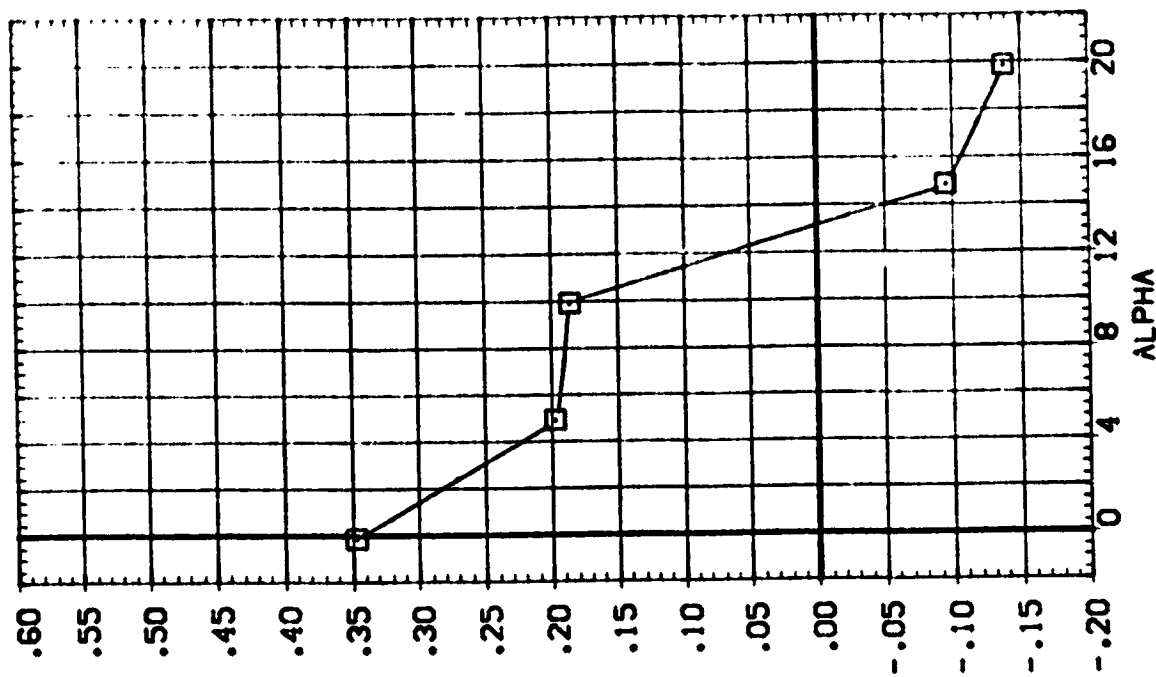
OMS NOZZLE

C2A

AVES 87-707 GA12

PARAMETRIC VALUES
BETA .000 RUDDER .000
ELEVON .000 RUD_R 40.000

SVWEC PAI X/LIN MAC
135.000 .200 2.498
180.000 .400
275.000



OMS NOZZLE PRESSURES

[R86C0:]

OMS NOZZLE

02A

AVES 87-707 CA12

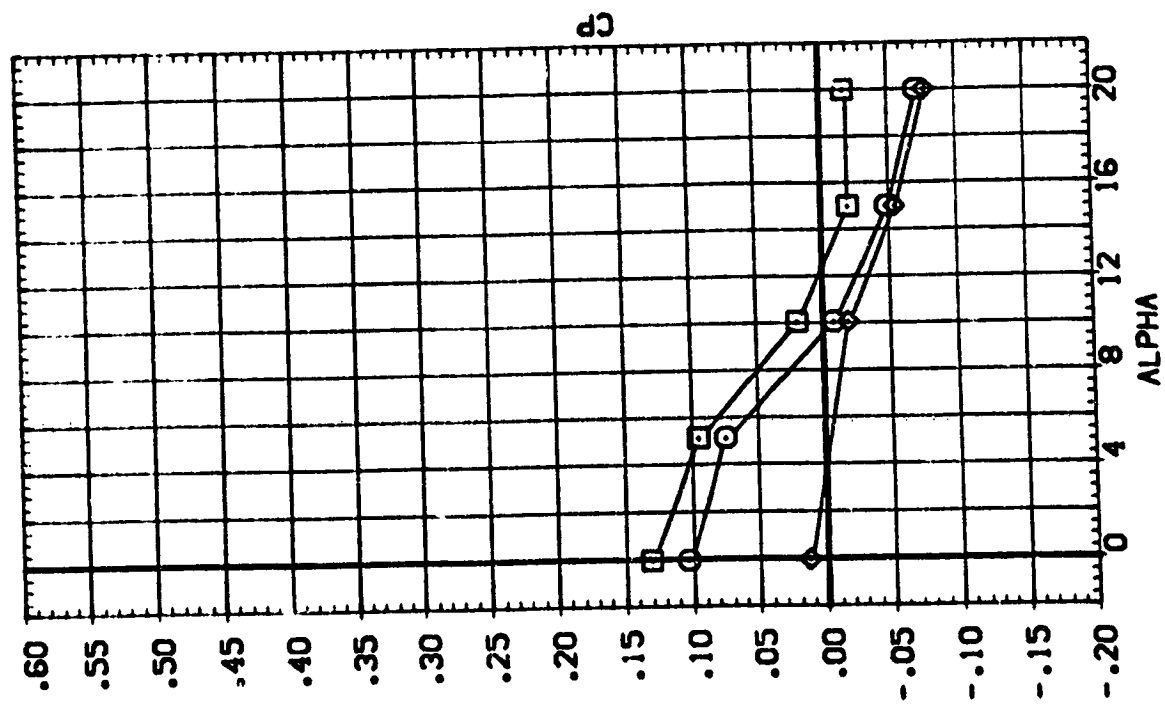
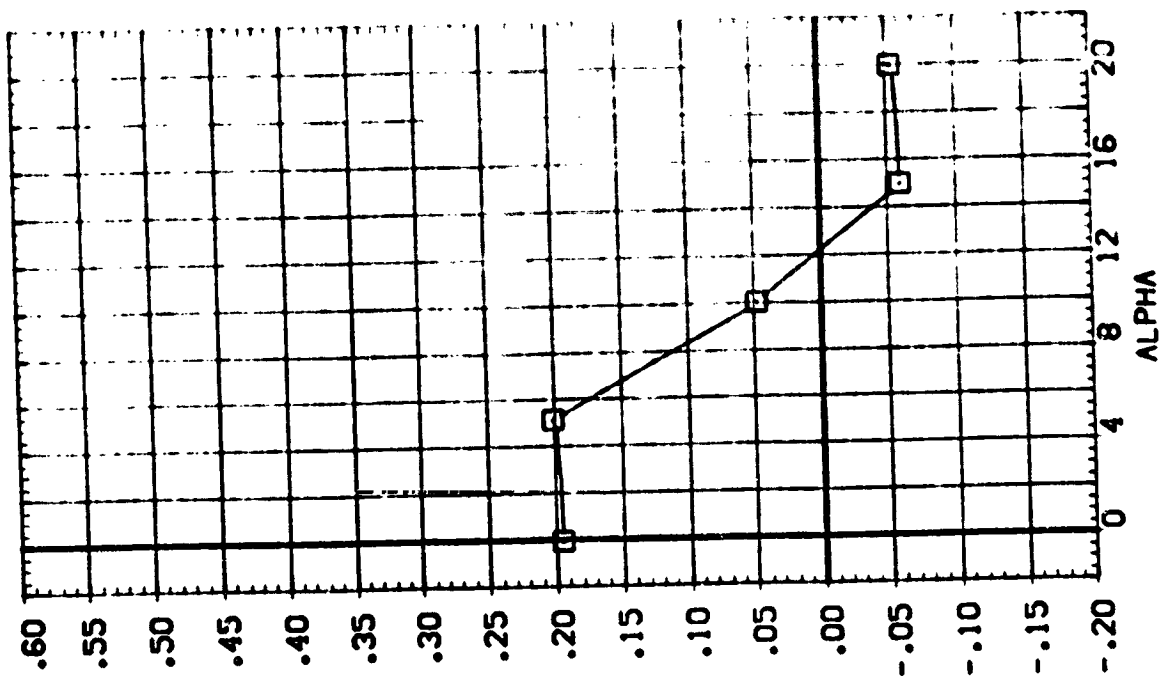
SYMBOL

PMI 135.000
180.000
275.000

X/LIN² .200
.400

MACH 3.502

PARAMETRIC VALUE
BE²A .000
ELEVON .000
R2DEP 40.000
R2DPR



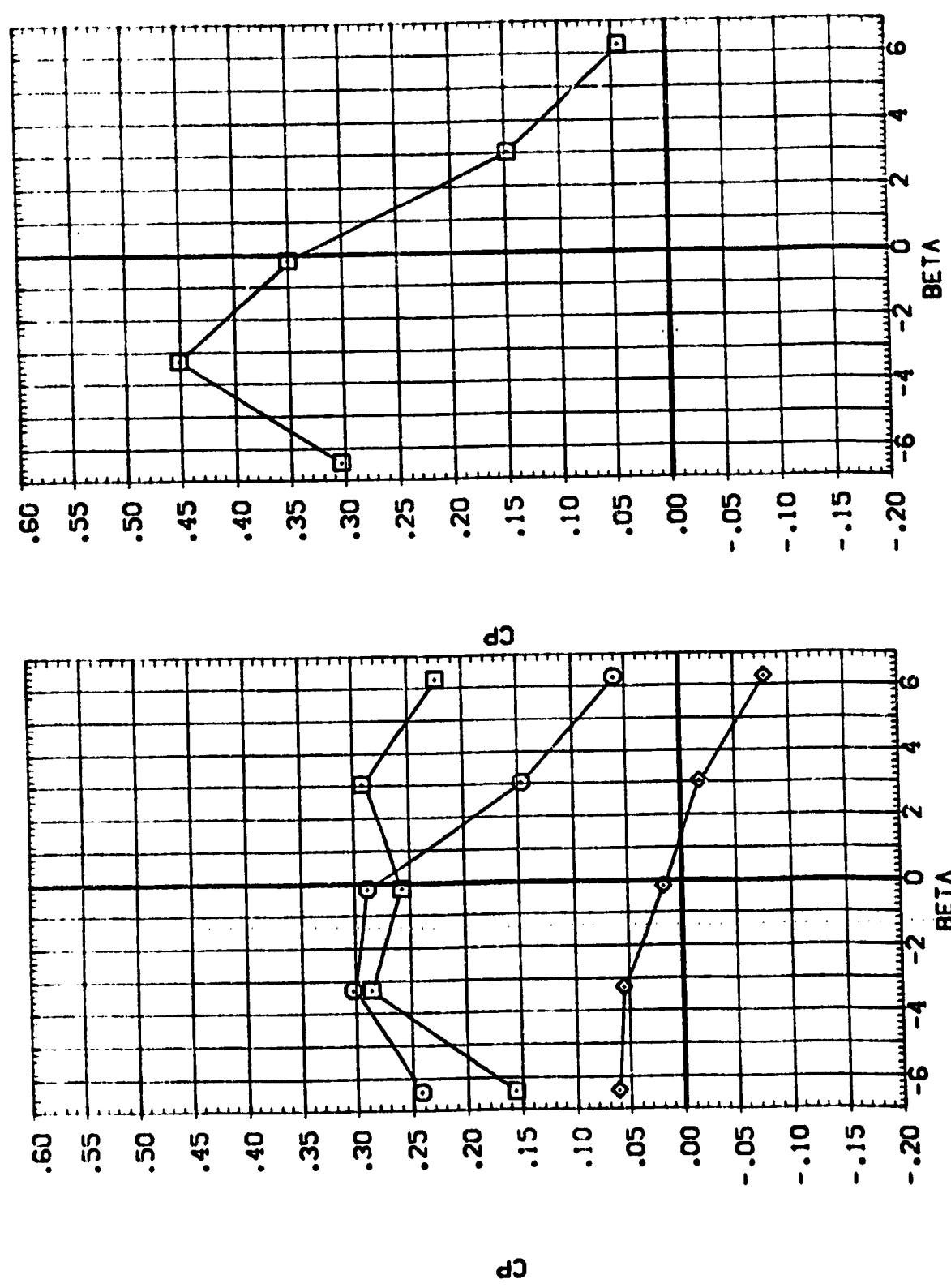
OMS NOZZLE PRESSURES



AVES 87-707 CA:2 02A QMS NOZZLE (RBQE05)

SYNOPSIS
135,000
150,000
200,000
250,000
300,000
350,000
400,000
450,000
500,000
550,000
600,000
650,000
700,000
750,000
800,000
850,000
900,000
950,000
1,000,000

PARAMETRIC VALUES
ALPHA .000 RUDER -20.000
ELEVON .000 RUDER 40.000



QMS NOZZLE PRESSURES

(RBQE05)

OMS NOZZLE

02A

AMES 87-707 0A12

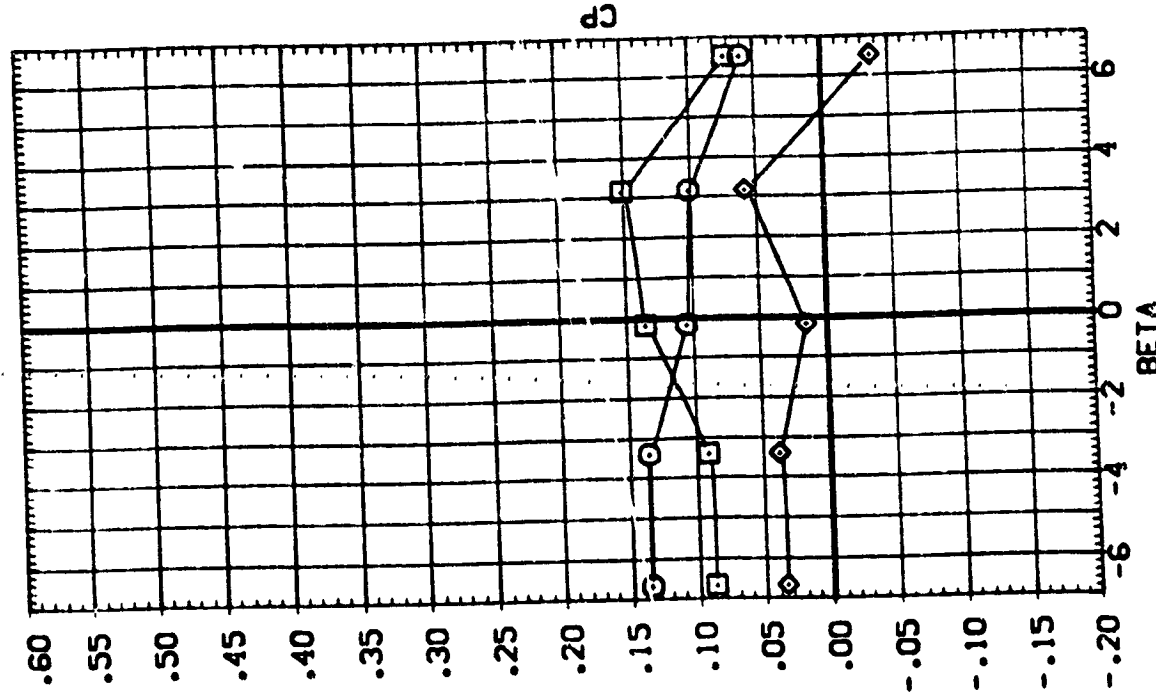
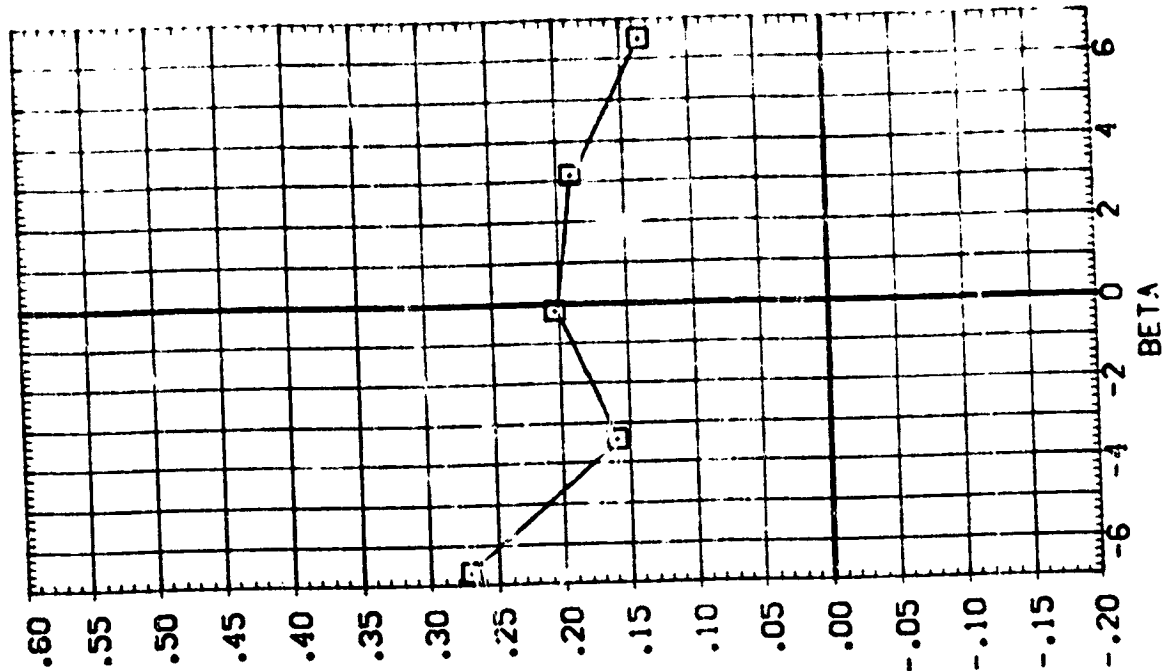
SYMBOL
C
◇

PMI
135.000
160.000
275.000

X/LIN
.200
.400

MACH
3.501

PARAMETRIC VALUES
ALPHA
ELEVON
.000
.000
RDO-R
70.000
10.000



OMS NOZZLE PRESSURES